

**Reissued: 23-Mar-10**

Model: AI-P1	Date: 13-Mar-08	No.: RG179001c
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**RTB Reissue**

The items in bold italics have been corrected.

Subject: Firmware Release Note: Network DocBox		Prepared by: K.Hamada	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input checked="" type="checkbox"/> Other (      )		

This RTB has been issued to announce the firmware release information for the **Network DocBox**.

Version	Program No.	Effective Date
<b>1.02</b>	<b>G1795744E</b>	<b>April 2010 production</b>
1.01	G1795744D	December 2009 production
1.00	G1795744C	November 2008 production
0.33	G1795744A	1st Mass production

Version	Modified Points or Symptom Corrected
<b>1.02</b>	<b>Symptom corrected:</b> <b>1. The printer might not transfer the job log or the access log to Web SmartDeviceMonitor or Remote Communication Gate S Pro.</b>
1.01	Symptom corrected: 1. Duplicate logs might be transferred to Web SmartDeviceMonitor.
1.00	Symptom corrected: 1. Job names that include the "%s" character prevent Web SmartDeviceMonitor from retrieving the MFP's job list. 2. Job names that include the "%s" character prevent the Document server from being accessed by the web service. The result is that the Document Server cannot be seen from Web Image Monitor. 3. The setting that controls access to the Debug Log (SP5842-001 bit #7) has no effect.
0.33	1st Mass production

**Reissued: 10-May-11**

Model: AI-P1	Date: 13-Mar-08	No.: RG179002i
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**RTB Reissue**

The items in bold italics have been corrected.

Subject: Firmware Release Note: Network Support		Prepared by: T. Hirakawa	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input checked="" type="checkbox"/> Other ( )	<input checked="" type="checkbox"/> Tier 2

This RTB has been issued to announce the firmware release information for the **Network Support**.

Version	Program No.	Effective Date	Availability of RFU
<b>7.36</b>	<b>G1795742K</b>	<b>May 2011 production</b>	<b>Not available</b>
7.34	G1795742J	October 2010 production	Not available
7.31	G1795742H	March 2010 production	Available
7.30	G1795742G	January 2010 production	Available
7.26	G1795742F	June 2009 production	Available
7.24.1	G1795742E	February 2009 production	Available
7.20	G1795742D	November 2008 production	Available
7.17	G1795742C	September 2008 production	Available
7.14	G1795742B	June 2008 production	Available
7.05.1	G1795742A	1st Mass production	Available

**Note: Definition of Availability of RFU via @Remote**

“Available”: The firmware can be updated via RFU or SD card.

“Not available”: The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
<b>7.36</b>	<p><b>Symptom corrected:</b></p> <ol style="list-style-type: none"> <li><b>An httpd timeout has been implemented to prevent Web ImageMonitor lockups that sometimes occurred when applications accessed the printer by http.</b></li> <li><b>If Windows Authentication is enabled, printing a large number of copies of a job might take longer than might typically be expected.</b></li> <li><b>Chunk Transfer Encoding over an IPP port might results in print jobs being reset.</b></li> <li><b>If SSDP = Active (Web ImageMonitor &gt; Configuration &gt; Network Security), a high load on the CPU might result in Web ImageMonitor locking up.</b></li> <li><b>LP with an external controller will lose network connectivity. This only occurred if the network settings were changed repeatedly and the LP's "NetWare" setting was already "Active" (before the network settings were changed).</b></li> <li><b>The LP icon might not be shown in the Windows "Network" dialogue if SSDP is enabled. This affected Windows Vista, 2008/R2, and 7.</b></li> </ol>

Reissued: 10-May-11

Model: AI-P1	Date: 13-Mar-08	No.: RG179002i
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Version	Modified Points or Symptom Corrected												
	<b>7. <i>The device might lose network connectivity if SSDP is enabled. Network connectivity could be temporarily restored after a power cycle.</i></b>												
7.34	<p><b>IMPORTANT:</b>                      When you update to this version of Network Support(ver. 07.34, Program No. G1795742J), be sure to install the following firmware version (or newer) together as a set, otherwise the machine will not function correctly.                      Upgrade the firmware listed in the table below together as a set, according to the options that are already installed on the customer's machine.</p> <table border="1"> <thead> <tr> <th>Firmware:</th> <th>Version:</th> <th>Program No.:</th> <th>Note:</th> </tr> </thead> <tbody> <tr> <td>Printer</td> <td>1.18</td> <td>G1795746M</td> <td>forG179</td> </tr> <tr> <td>Web Support</td> <td>1.14</td> <td>G1795743D</td> <td>forG179</td> </tr> </tbody> </table> <p>Symptom corrected:</p> <ol style="list-style-type: none"> <li>1. If the MFP/LP has a statically configured IP address and domain, it always sends a HELO using just its hostname. SMTP servers that require client HELOs to include the client's FQDN will close the connection. The result of this was that the MFP/LP was unable to send emails.</li> <li>2. Unable to retrieve the Windows group name from a Windows 2008 R2 server during Windows Authentication. Because of this, logged in users will only be granted the "Available Functions" specified for them in the Addressbook.</li> <li>3. The device is unable to assign group privileges to a logged in user if that group has a name consisting of more than 20 bytes. To address this issue, the supported group name length will be increased to 40 bytes.</li> <li>4. The printer's Windows Authentication function is unable to use Kerberos when being authenticated on a Windows 2008 or Windows 2008 R2 server. The printer will still be successfully authenticated because it is able to fail back to NTLMv2.</li> <li>5. If the printer's IP address is changed to an IP address of another subnet, users will not be able to browse the network (using Scan to SMB) until the printer is rebooted.</li> </ol> <p>Other changes:                      -----                      SSL-related changes:                      Note: The new field will only appear if Web Support firmware version 1.14 or later and Printer firmware version 1.18 or later has also been applied to the device.</p> <ol style="list-style-type: none"> <li>1. When the device creates a certificate request, it is now able to specify which algorithm (SHA1 or MD5) it wants used to sign the certificate. This has been implemented by adding a field "Algorithm Signature" to the certificate request form.</li> <li>2. Web Image Monitor now shows the certificate's key length in:                             <ul style="list-style-type: none"> <li>- Configuration &gt; Security &gt; Device Certificate &gt; Details</li> </ul> </li> </ol>	Firmware:	Version:	Program No.:	Note:	Printer	1.18	G1795746M	forG179	Web Support	1.14	G1795743D	forG179
Firmware:	Version:	Program No.:	Note:										
Printer	1.18	G1795746M	forG179										
Web Support	1.14	G1795743D	forG179										

Reissued: 10-May-11

Model: AI-P1		Date: 13-Mar-08	No.: RG179002i
Version	Modified Points or Symptom Corrected		
	<p>3. Specific versions of SSL or TLS (SSLv2, SSLv3, or TLSv1) can now be enabled/disabled using Web Image Monitor. The setting can be configured from either of the following locations:</p> <ul style="list-style-type: none"> <li>- Configuration &gt; Security &gt; Network Security</li> <li>- Configuration &gt; Security &gt; SSL/TLS</li> </ul> <p>4. The encryption strength used for SSL can now be configured. This can be done using either of the following settings in Web Image Monitor:</p> <ul style="list-style-type: none"> <li>- Configuration &gt; Security &gt; Network Security</li> <li>- Configuration &gt; Security &gt; SSL/TLS</li> </ul> <p>-----</p> <p>5. For security reasons, the device will no longer accept SSL incoming, or establish outgoing, connections that use NULL or ADH ciphers.</p> <p>6. Windows Authentication fails if the username or password includes lower-case European characters.</p> <p>7. The device's SMB timeout was too short (1sec). This caused problems when being used across subnets. For this reason, it has been increased to 10 sec.</p>		
7.31	<p>Other changes:</p> <ol style="list-style-type: none"> <li>1. For security reasons, the device will no longer accept SSL connections that use the NULL or Anonymous Diffie-Hellman ciphers.</li> </ol>		
7.30	<p>Symptom corrected:</p> <ol style="list-style-type: none"> <li>1. The printer's IP address lease renewal request is incorrectly formatted and rejected by DHCP relay agents. This will result in a loss of connectivity that lasts until the printer reinitializes the network connection (10 seconds).</li> <li>2. If either of the WSD Printer or Netware functions are enabled, the following problems might occur. If these problems occur, they typically last for about 2.5 hours. <ul style="list-style-type: none"> <li>- The network might become unresponsive.</li> <li>- Menu can be accessed but configuration changes will not be applied.</li> </ul> </li> <li>3. Windows authentication might fail on a domain controller whose hostname contains 2 byte characters.</li> <li>4. SDK/J applications might not be able to recognize some supported USB devices.</li> <li>5. When the device IP address and DNS server location are obtained from DHCP, the domain specified by the device setting "IPv4 &gt; Domain Name &gt; Specify" will be overwritten by the domain obtained from DHCP.</li> </ol>		
7.26	<p>Symptom corrected:</p> <ol style="list-style-type: none"> <li>1. When jobs are submitted to the device's lpr port repeatedly, some of the jobs might not be printed.</li> <li>2. If IPP authentication is enabled, printing through an IPP port from a Windows Vista/Server 2008 client might result in printing failure.</li> <li>3. Multiple Windows Vista/Server 2008 PCs might not be able to access the device through IPsec.</li> </ol>		
7.24.1	<p>Other changes:</p> <ol style="list-style-type: none"> <li>1. Kerberos authentication support for Windows Server 2008.</li> </ol> <p>Symptom corrected:</p> <ol style="list-style-type: none"> <li>1. IPP print jobs are cancelled. This happened very infrequently.</li> </ol>		

Reissued: 10-May-11

Model: AI-P1		Date: 13-Mar-08	No.: RG179002i
Version	Modified Points or Symptom Corrected		
	<ol style="list-style-type: none"> <li>2. After a job consisting of a multiple of exactly 8KB (8192 bytes) is submitted via IPP, the device will no longer accept any more jobs until rebooted.</li> <li>3. If both SNTP and Date/Time settings are configured in WIM, WIM might not be accessible. This happened very infrequently (about 1% of the time).</li> </ol> <p>Note: The fix requires that System firmware version 1.11 or later be applied to the device.</p>		
7.20	<ol style="list-style-type: none"> <li>1. If the device fails to establish a WPA or WPA2 connection once, it will not try again until rebooted.</li> <li>2. The device is unable to roam between access points using different versions of the IEEE 802.11 standard (a, b, or g).</li> <li>3. LPR jobs submitted by an HP-UX, AIX or Netware 6.5 (SP6 or SP7) host will be cancelled, resulting in an error.                      Note: This problem will not affect Netware 6.5 SP7 if the patch "iprntnw65sp7b.zip" has been installed.  <a href="http://download.novell.com/Download?buildid=HsQQ9fMHax0~">http://download.novell.com/Download?buildid=HsQQ9fMHax0~</a></li> <li>4. The device doesn't advertise its hostname via DHCP option 12. The DNS server might not be updated by DHCP.</li> </ol>		
7.17	<p>Symptom corrected:</p> <ol style="list-style-type: none"> <li>1. Jobs submitted using the IE ftp client result in an SC991 error. This only occurs using Windows XP x64.</li> <li>2. Sending a PJJ readback (or ustatus) will result in an SC997. This only occurs if diprint's bidirect is on from telnet.</li> <li>3. SNMP events (Access Violation or Lockout), are not recorded in the Access Log.</li> <li>4. If the sending of a Scan to Email using SMIME is interrupted (ie. A job is submitted to the printer or the device application is switched before the email has been sent), an SC997 error will occur.</li> <li>5. When a WSD client boots, the device's WSD service might be stopped.</li> <li>6. "Date/Time" changes initiated by an SNTP server are not recorded in the Access Log.</li> </ol> <p>The device might not be able to access the network once the Log collection tool is run (TechMail#TS080441).</p>		
7.14	<p>Symptom corrected:</p> <ol style="list-style-type: none"> <li>1. The device might not be able to reboot via WIM after the device's date/time is decremented to an earlier date/time using WIM.</li> <li>2. An SSL2.0 client code fails to properly check for NULL(CVE-2006-4343). (TechMail#OTS-2008-185)</li> <li>3. Multiple RSA implementations fail to properly handle signatures(CVE-2006-4339). (TechMail#OTS-2008-276).</li> <li>4. Web SmartDeviceMonitor shows the IP addresses of TWAIN clients in reverse. Example: 192.168.1.10 ==&gt; 10.1.168.192</li> <li>5. If an LPR job is submitted to the device followed by an AppleTalk job, the device will stall.</li> <li>6. An SC819 error might be shown on the operation panel if the device is accessed via IPsec repeatedly without a power cycle.</li> <li>7. An SC997 will be displayed on the Operation Panel of EFI controller based devices if IPv6 network settings are changed.</li> <li>8. Excessive time lag when the device rejoins the network after exiting Energy Saver Mode. This will occur under either one of the following conditions:                     <ul style="list-style-type: none"> <li>- The device is connected to a hub that uses the spanning tree protocol.</li> </ul> </li> </ol>		

**Reissued: 10-May-11**

Model: AI-P1		Date: 13-Mar-08	No.: RG179002i
Version	Modified Points or Symptom Corrected		
	<p>– The device is connected via Wireless LAN.</p> <p>9. If WPA2 is configured for a device, the Access Log List in WSDM ver 2.x will always show the WPA Encryption Method as TKIP and never as CCMP (AES), regardless of actual settings.</p> <p>Other changes:</p> <ol style="list-style-type: none"><li>1. The device supports Windows server 2008 DHCPv6 server.</li><li>2. The IPDS option is now available. To use this option, System firmware (version 1.08 or later), NCS firmware (version 7.14 or later), Websys firmware (version 1.12 or later) and Printer firmware (version 1.08 or later) needs to be applied to the device.</li></ol>		
7.05.1	1st Mass production		

**Reissued: 17-Nov-10**

Model: AI-P1	Date: 13-Mar-08	No.: RG179004c
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**RTB Reissue**

The items in bold italics have been corrected.

Subject: Firmware Release Note: Web Support		Prepared by: T. Hirakawa	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input checked="" type="checkbox"/> Other (        )		

This RTB has been issued to announce the firmware release information for the **Web Support**.

Version	Program No.	Effective Date
<b>1.14</b>	<b>G1795743D</b>	<b>October 2010 production</b>
1.13	G1795743C	December 2009 production
1.12	G1795743B	June 2008 production
1.06	G1795743A	1st Mass production

Version	Modified Points or Symptom Corrected												
<b>1.14</b>	<p><b>IMPORTANT:</b>  <i>When you update to this version of Web Support (ver. 01.14, Program No. G1795743D), be sure to install the following firmware version (or newer) together as a set, otherwise the machine will not function correctly. Upgrade the firmware listed in the table below together as a set, according to the options that are already installed on the customer's machine.</i></p> <table border="1"> <thead> <tr> <th>Firmware:</th> <th>Version:</th> <th>Program No.:</th> <th>Note:</th> </tr> </thead> <tbody> <tr> <td>Printer</td> <td>1.18</td> <td>G1795746M</td> <td>forG179</td> </tr> <tr> <td>Network Support</td> <td>7.34</td> <td>G1795742J</td> <td>forG179</td> </tr> </tbody> </table> <p><b>Other changes:</b>  <b>SSL-related changes:</b>  <i>Note: The new fields will only appear if Network Support firmware version 7.34 or later and Printer firmware version 1.18 or later have also been applied to the device.</i></p> <ol style="list-style-type: none"> <li><i>When the device creates a certificate request, it is now able to specify which algorithm (SHA1 or MD5) it wants used to sign the certificate. This has been implemented by adding a field "Algorithm Signature" to the certificate request form.</i></li> <li><i>Web Image Monitor now shows the certificate's key length in:</i>  - <b>Configuration &gt; Security &gt; Device Certificate &gt; Details</b></li> </ol>	Firmware:	Version:	Program No.:	Note:	Printer	1.18	G1795746M	forG179	Network Support	7.34	G1795742J	forG179
Firmware:	Version:	Program No.:	Note:										
Printer	1.18	G1795746M	forG179										
Network Support	7.34	G1795742J	forG179										

Reissued: 17-Nov-10

Model: AI-P1		Date: 13-Mar-08	No.: RG179004c
Version	Modified Points or Symptom Corrected		
	<p><b>3. Specific versions of SSL or TLS (SSLv2, SSLv3, or TLSv1) can now be enabled/disabled using Web Image Monitor. The setting can be configured from either of the following locations:</b></p> <ul style="list-style-type: none"> <li>- Configuration &gt; Security &gt; Network Security</li> <li>- Configuration &gt; Security &gt; SSL/TLS</li> </ul> <p><b>4. The encryption strength used for SSL can now be configured. This can be done using either of the following settings in Web Image Monitor:</b></p> <ul style="list-style-type: none"> <li>- Configuration &gt; Security &gt; Network Security</li> <li>- Configuration &gt; Security &gt; SSL/TLS</li> </ul>		
1.13	Symptom corrected: Changes to the "Web ImageMonitor > Configuration > Security > IPsec > Encryption Key Auto Exchange Settings > Security Details > Phase 2 > Security Protocol setting" are not applied to the device.		
1.12	<p>Symptom corrected:</p> <ol style="list-style-type: none"> <li>1. The unsupported paper size (5 1/2 x 8 1/2 Landscape) is shown in the Bypass tray's paper size field.</li> <li>2. WIM displays "This device is currently in use by other functions. Please try again later". A reboot of the device is needed to use WIM again.</li> </ol> <p>Other changes:</p> <ol style="list-style-type: none"> <li>1. The IPDS option is now available. To use this option, System firmware (version 1.08 or later), NCS firmware (version 7.14 or later), Websys firmware (version 1.12 or later) and Printer firmware (version 1.08 or later) needs to be applied to the device.</li> </ol>		
1.06	1st Mass production		

**Reissued: 06-Jan-11**

Model: AI-P1	Date: 13-Mar-08	No.: RG179005e
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**RTB Reissue**

The items in ***bold italics*** have been added.

Subject: Firmware Release Note: Engine		Prepared by: T.Hirakawa	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input checked="" type="checkbox"/> Other (        )		

This RTB has been issued to announce the firmware release information for the **Engine**.

Version	Program No.	Effective Date	Availability of RFU
<b><i>1.06:01</i></b>	<b><i>G1795160G</i></b>	<b><i>January 2011 production</i></b>	<b><i>Available</i></b>
1.05:01	G1795160F	March 2010 production	Available
1.04:01	G1795160E	October 2008 production	Available
1.03:01	G1795160D	August 2008 production	Available
1.02:01	G1795160C	April 2008 production	Available
1.01:01	G1795160B	February 2008 production	Available
1.00:01	G1795160A	1st Mass production	Available

**Note: Definition of Availability of RFU**

“Available”: The firmware can be updated via RFU or SD card.

“Not available”: The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
<b><i>1.06:01</i></b>	<b><i>Other changes</i></b>  <ol style="list-style-type: none"> <li><b><i>1. Improve the reliability of detection of opening-closing timing of the bridge unit door.</i></b></li> <li><b><i>2. Improve the reliability of continuous action among printing jobs while multiple continuous printing with the staple function selected.</i></b></li> </ol>
1.05:01	Minor bug correction
1.04:01	The print speed decreases under the following conditions: - A duplex job is performed using "limitless paper feed", and - The machine switches over to another tray after running out of paper
1.03:01	Minor changes applied to improve reliability
1.02:01	1. The cleaning web sometimes reaches its End condition before the 160K PM target. When both of the following conditions occur, the possibility of occurrence increases: - The more jobs are performed per day, AND - The more times the machine enters Off Mode per day.
1.01:01	Minor changes applied to improve reliability
1.00:01	1st Mass production

Reissued: 26-Apr-11

Model: AI-P1	Date: 13-Mar-08	No.: RG179006e
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**RTB Reissue**

The items in bold italics have been corrected.

Subject: Firmware Release Note: Option PCL		Prepared by: T.Hirakawa	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input checked="" type="checkbox"/> Other ( )		

This RTB has been issued to announce the firmware release information for the **Option PCL**.

Version	Program No.	Effective Date	Availability of RFU
<b>1.06</b>	<b>G1795749F</b>	<b>May 2011 production</b>	<b>Available</b>
1.05	G1795749E	April 2010 production	Available
1.04	G1795749D	February 2010 production	Available
1.03	G1795749C	June 2009 production	Available
1.02	G1795749B	November 2008 production	Available
1.01	G1795749A	1st Mass production	Available

Note: Definition of Availability of RFU via @Remote

“Available”: The firmware can be updated via RFU or SD card.

“Not available”: The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
<b>1.06</b>	<p><b>Symptom corrected:</b></p> <ol style="list-style-type: none"> <li><b>PCL5e/c jobs are canceled if all of the following conditions are met: The job specifies that a custom paper size by drawn from the bypass tray. -"User Tools/Counter &gt; System Settings &gt; Tray Paper Settings &gt; Printer Bypass Paper Size" is something other than "Custom size"</b></li> <li><b>If a PCL6 job is printed to a shift tray immediately following a PCL5 job, each page of the PCL6 job will be shifted instead of each job or copy being shifted.</b></li> </ol> <p><b>Note: This problem was reported most often in cases where a PCL6 job is printed with the Windows PCL5 Separator page (PCL.sep).</b></p> <ol style="list-style-type: none"> <li><b>When a page object is superimposed over top of another, the overlapping portions of the objects might be printed in black even if they were not black objects.</b></li> <li><b>PCL XL error resulting in jobs being cancelled occurring under a very specific set of circumstances.</b></li> <li><b>A macro that is only supposed to be printed on the first page of a job, might also be printed on subsequent pages.</b></li> <li><b>A device stall might occur if using a very specific combination of font types.</b></li> </ol>

**Reissued: 26-Apr-11**

<b>Version</b>	<b>Modified Points or Symptom Corrected</b>
1.05	Symptom corrected: Every object on the page is shifted in one direction. This problem only affected HP-GL/2 jobs.
1.04	Other changes: 1. PCL jobs containing images might be printed slowly. 2. The device suddenly stops printing PCL5 macros after printing a large number of pages (500 or more) and continues to omit macros from PCL5 jobs until the device is rebooted.
1.03	Symptom corrected: Part of pentagon shaped graphics not printed.
1.02	Symptom corrected: 1. Single page PCL jobs containing a Vertical Cursor Positioning command are split in two and printed on 2 pieces of paper. Jobs submitted using a Windows or MacOS driver were not affected. 2. After a PCL5 job is printed, all subsequent PCL6 jobs will be output to the same tray as the PCL5 job. This continues until the device is rebooted. PCL6 jobs that used finishing options were unaffected.
1.01	1st Mass production

Reissued: 01- Sep-11

Model: AI-P1	Date: 13-Mar-08	No.: RG179007c
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RTB Reissue

The items in bold italics have been corrected.

Subject: Firmware Release Note: PS3/PDF		Prepared by: T.Hirakawa	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input checked="" type="checkbox"/> Other ( )		

This RTB has been issued to announce the firmware release information for the **PS3/PDF**.

Version	Program No.	Effective Date	Availability of RFU
<b>1.03</b>	<b>G1795750D</b>	<b>October 2011 production</b>	<b>Available</b>
1.02	G1795750C	February 2010 production	Available
1.01	G1795750B	June 2009 production	Available
1.00	G1795750A	1st Mass production	Available

Note: Definition of Availability of RFU via @Remote

“Available”: The firmware can be updated via RFU or SD card.

“Not available”: The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
<b>1.03</b>	<p><b>Symptom corrected:</b></p> <ol style="list-style-type: none"> <li><b>If the submission of a PDF Direct job results in a disk-full error, all subsequent PDF Direct jobs (even ones that don't exceed the disk size) will be reset.</b> <ul style="list-style-type: none"> <li><b>Note: The occurrence of the problem and effectiveness of the fix are unrelated to whether or not the device has a hard disk or is using a RAM disk.</b></li> </ul> </li> <li><b>If printing a PDF Direct job that calls a "download font" from the hard disk (or Ram disk), one of the other resident fonts might be used instead. (GFPR#RE10070014)</b></li> <li><b>If printing a PDF Direct job containing embedded fonts that have the same name but are actually different fonts, characters will be garbled. (GFPR#RA11020001, RE10080005, RA10020002)</b></li> </ol>
1.02	<p>Symptom corrected:</p> <ol style="list-style-type: none"> <li>Batch printing of PDF documents results in a memory overflow and all jobs being cancelled.</li> </ol>
1.01	<p>Symptom corrected:</p> <ol style="list-style-type: none"> <li>PDF Direct Printing of PDFs containing multiple images might result in the PS error "limitcheck" being printed.</li> </ol>
1.00	1st Mass production

**Reissued: 26-Apr-11**

Model: AI-P1	Date: 13-Mar-08	No.: RG179008k
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**RTB Reissue**

The items in bold italics have been corrected or added.

Subject: Firmware Release Note: Printer		Prepared by: T. Hirakawa	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input checked="" type="checkbox"/> Other ( )	<input checked="" type="checkbox"/> Tier 2

This RTB has been issued to announce the firmware release information for the **Printer**.

Version	Program No.	Effective Date
<b>1.19</b>	<b>G1795746N</b>	<b>May 2011 production</b>
1.18	G1795746M	November 2010 production
1.17	G1795746L	April 2010 production
1.16	G1795746K	January 2010 production
1.15	G1795746J	December 2009 production
1.14	G1795746H	June 2009 production
1.13	G1795746G	May 2009 production
1.12	G1795746F	April 2009 production
1.11	G1795746E	February 2009 production
1.10	G1795746D	November 2008 production
1.09	G1795746C	September 2008 production
1.08	G1795746B	June 2008 production
1.00	G1795746A	1st Mass production

Version	Modified Points or Symptom Corrected
<b>1.19</b>	<p><b>Symptom corrected:</b></p> <ol style="list-style-type: none"> <li><b>PS jobs with a large number of images might be unexpectedly reset.</b></li> <li><b>Multiple jobs that are released (printed from the hard disk) by the same user might result in some of the jobs being recorded in the device's Job History as being printed by "---". This only affects the use of the following Job Types and only occurs if User Authentication is enabled:</b> <ul style="list-style-type: none"> <li>- <b>Sample Print</b></li> <li>- <b>Hold Print</b></li> <li>- <b>Locked Print</b></li> <li>- <b>Stored Print</b></li> </ul> </li> <li><b>If a job is submitted while the Printer application is still in the process of starting up, the Printer application might stall with "Processing..." displayed on the operation panel.</b></li> </ol> <p><b>Other changes:</b>  <b>A new BitSwitch#6-7 has been added. When set to '1', if multiple collated copies are printed, the device no longer responds to PJI USTATUS with the</b></p>

Reissued: 26-Apr-11

Model: AI-P1	Date: 13-Mar-08	No.: RG179008k
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Version	Modified Points or Symptom Corrected												
	<i>number of pages in the current copy. Instead the device will return the total number of pages for all copies.</i>												
1.18	<p><b>IMPORTANT:</b> When you update to this version of Printer(ver. 01.18, Program No. G1795746M), be sure to install the following firmware version (or newer) together as a set, otherwise the machine will not function correctly. Upgrade the firmware listed in the table below together as a set, according to the options that are already installed on the customer's machine.</p> <table border="1"> <thead> <tr> <th>Firmware:</th> <th>Version:</th> <th>Program No.:</th> <th>Note:</th> </tr> </thead> <tbody> <tr> <td>Web Support</td> <td>1.14</td> <td>G1795743D</td> <td>forG179</td> </tr> <tr> <td>Network Support</td> <td>7.34</td> <td>G1795742J</td> <td>forG179</td> </tr> </tbody> </table> <p>Symptom corrected:</p> <ol style="list-style-type: none"> <li>If IPDS fonts are reset (Menu button &gt; Maintenance &gt; HD Management &gt; Reset IPDS Fonts), users might not be able to logout from the operation panel.</li> <li>An IPDS Form can be created with unsupported dimensions using Web Image Monitor (Configuration &gt; IPDS Form List &gt; Media Size = Custom Size &gt; Cross Feed Dimension/Feed Dimension). Once created it can be selected using the IPDS Form Allocation setting. Note: Supported dimensions for this model are: Cross Feed Dimension: 182.0 - 297.0 mm Feed Dimension: 210.0 - 432.0 mm Note: To fix this problem, Printer firmware (version 1.18 or later), System firmware (version 1.18 or later) need to be applied to the device.</li> <li>Suspending a job (Suspend/Resume button) and then opening a tray might result in the printer hanging. The job cannot be resumed and the printer must be rebooted.</li> </ol> <p>Other changes: The setting "Menu &gt; Host Interface &gt; Network &gt; Permit SSL/TLS Comm." has been added. Note: For this change to take effect, Network Support firmware version 7.34 or later and Web Support firmware version 1.14 or later both need to be applied to the printer.</p>	Firmware:	Version:	Program No.:	Note:	Web Support	1.14	G1795743D	forG179	Network Support	7.34	G1795742J	forG179
Firmware:	Version:	Program No.:	Note:										
Web Support	1.14	G1795743D	forG179										
Network Support	7.34	G1795742J	forG179										
1.17	<p>Symptom corrected:</p> <ol style="list-style-type: none"> <li>Jobs not containing any PJP commands are held by the device and not printed until another job is submitted or a button is pressed on the device. This occurred if the device entered in energy saver mode immediately after printing a diagnostics page (List/Test Print, etc.).</li> <li>If the Auto Continue setting is "Immediate" and the source tray runs out of paper, the device will stall. This only occurred if the paper ran out after several small jobs (30 or 40) were submitted back to back.</li> </ol>												

Reissued: 26-Apr-11

Model: AI-P1	Date: 13-Mar-08	No.: RG179008k
Version	Modified Points or Symptom Corrected	
	<p>3. IPDS jobs are cancelled if submitted to a tray whose paper type is configured as a "User Paper Type".</p> <p>4. A form is assigned to a tray (Web Image Monitor &gt; Configuration &gt; Printer &gt; Basic Settings &gt; IPDS Menu &gt; IPDS Form Allocation), but this form assignment cannot be seen in the operation panel setting (Menu button &gt; Print Settings &gt; IPDS menu &gt; Tray Form).</p> <p>5. The Reset IPDS Fonts confirmation dialogue cannot be closed without stalling the device.</p> <p>After the IPDS fonts are reset (Menu button &gt; Maintenance &gt; HD Management &gt; Reset IPDS Fonts &gt; OK) a confirmation "Are you sure you want to reset IPDS Fonts?" is shown. This is correct. However, due to this bug, it would be shown repeatedly if "Yes" was pressed. The only way to close this dialogue was to press "No". Furthermore, if "No" was pressed after "Yes" had been pressed 3 or more times, the device would stall.</p> <p>6. The following steps might stall the device.</p> <ul style="list-style-type: none"> <li>- Configure "Menu button &gt; Print Settings &gt; IPDS menu &gt; Color Simulation &gt; Legacy"</li> <li>- Navigate to the last page of the IPDS menu and hit the Escape button.</li> </ul>	
1.16	<p>Symptom corrected:</p> <ol style="list-style-type: none"> <li>1. If printing of an IPDS job is interrupted by an error requiring operator attention (paper jam, cover open, etc.), an alert is sent to the host after the error state has been recovered, instead of when the device first enters the error state.</li> <li>2. The device becomes unresponsive displaying "Waiting for Print data..." if any of the following settings are changed while the device has an active IPDS session. <ul style="list-style-type: none"> <li>- Printer Features</li> <li>- System Settings</li> <li>- Tray Paper Settings</li> <li>- Adjustment Settings for Operators</li> </ul> </li> </ol> <p>Note: The printer status returned to Ready after the IPDS session timed out.</p>	
1.15	<p>Symptom corrected:</p> <ol style="list-style-type: none"> <li>1. The use of SDK applications that access the GPS Filter (such as the PDL filter) might result in slow printing.</li> <li>2. Printing multiple jobs of differing PDLs to Virtual Printers of differing priorities might result in the device stalling.</li> <li>3. If any non-IPDS job in the print queue is deleted while receiving an IPDS job, the device will stall.</li> </ol> <p>WIM: Job &gt; Current/Waiting Jobs &gt; Delete Reservation  Operation Panel: Job List &gt; Delete Reservation</p> <p>Other Changes:  IPDS jobs can no longer be deleted from the print queue.  WIM: Job &gt; Current/Waiting Jobs &gt; Delete Reservation  Operation Panel: Job List &gt; Delete Reservation</p> <p>Note: This change was made because deleting IPDS jobs from the print queue stalled the device.</p>	

Reissued: 26-Apr-11

Model: AI-P1		Date: 13-Mar-08	No.: RG179008k
Version	Modified Points or Symptom Corrected		
1.14	Symptom corrected: 1. Jobs smaller than 2Kb cause slow printing if the Printer Language is AUTO. 2. A jam or other minor error affecting an IPDS job might cause the device to stall. 3. The device might stall if an IPDS job draws pages from both the interposer and an MFP tray, and a jam occurs. 4. Jobs including the "@PJL DEFAULT" environment variable RESOLUTION or BITSPERDOT result in an SC997 error. 5. If the device receives a non-IPDS job while it is processing an IPDS job, the device will stall.		
1.13	Symptom corrected: 1. The service call status icon is displayed in WIM when the waste toner receptacle is full. 2. Cannot print while "Replace Maintenance Kit B" is displayed. Note: To fix this problem, System firmware (version 1.13 or later), Printer firmware (version 1.13 or later) needs to be applied to the device.		
1.12	Symptom corrected: 1. Minor bug correction.		
1.11	Symptom corrected: 1. If the Selective User Authentication function (SP5-420-041) and User Authentication are both enabled, unauthenticated users can directly access the urls of WIM's Printer Job History, Printer Error Log and Print Job List. 2. - Even if installed, "Maintenance Kit A" is not displayed in WIM > Home > Supplies > Other. - "Maintenance Kit B" is displayed as simply "Maintenance Kit" in WIM > Home > Supplies > Other. 3. Personal Information Protect (SP5-888-001 = 1) is unable to prevent users from directly accessing the urls of WIM's Printer Job History, Printer Error Log and Print Job List.		
1.10	Symptom corrected: 1. IPDS jobs that use a media type that doesn't support duplex, might cause the device to stall. 2. If the Menu > Supplies button on the device is pressed during printing of an RPCS job, duplex will be cancelled. 3. If the Menu > Supplies button on the device is pressed during printing, finishing features might be cancelled.		
1.09	Symptom corrected: 1. Storing a large number of jobs to the device HDD as Job Type (I.e. Stored Print, Locked Print) might cause the device to stall if User Authentication is enabled. 2. IPDS jobs with both duplex and blank pages will appear to stall if a jam occurs. 3. If a job is automatically reset by IPDS due to a paper jam and the next job sent to the printer prints has different print settings (source tray, paper type, paper size, etc.) than the reset job, the device will stall. 4. If 10 or more IPDS jobs are automatically reset by IPDS due to paper jams, the device might stall. 5. Low priority RPCS jobs are canceled by high priority jobs when using Virtual Printer. 6. The Panel Key Sound menu is unaccessible.		
1.08	Symptom corrected: 1. The value of Image Density Adjustment (Operation Panel > Maintenance > Quality		

**Reissued: 26-Apr-11**

Model: AI-P1	Date: 13-Mar-08	No.: RG179008k
Version	Modified Points or Symptom Corrected	
	<p>Maintenance &gt; Image Density Adjustment) appears to revert to default after a power cycle. Though the default value is shown if viewed in the operation panel, the actual value used by the machine is correct.</p> <p>Other changes: 1. The IPDS option is now available. To use this option, System firmware (version 1.08 or later), NCS firmware (version 7.14 or later), Websys firmware (version 1.12 or later) and Printer firmware (version 1.08 or later) needs to be applied to the device.</p>	
1.00	1st Mass production	

**Reissued: 20-Jul-12**

Model: <b>Model AI-P1</b>	Date: 21-Apr-08	No.: RG179009g
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**RTB Reissue**

The items in bold italics have been corrected or added.

Subject: Firmware Release Note: Option IPDS		Prepared by: T. Hirakawa	
From: 1st Tech Service Sect., MFP/Printer Tech Service Dept			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input checked="" type="checkbox"/> Other ( )		<input checked="" type="checkbox"/> Tier 2

This RTB has been issued to announce the firmware release information for the **Option IPDS**.

Version	Program No.	Effective Date	Availability of RFU
4.746	M3455910D	September 2010 production	Available
4.744	M3455910C	December 2009 production	Available
4.739	M3455910B	August 2009 production	Available
4.732	M3455910A	September 2008 production	Available
4.731	M3455910	1st Mass production	Available

**Note: Definition of Availability of RFU via @Remote**

**“Available”** The firmware can be updated via RFU or SD card.

**“Not available”:** The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
4.746	<p>Symptom corrected:</p> <ol style="list-style-type: none"> <li>Duplex IPDS jobs are printed simplex if the Printer is powered up while a tray is open. Specifically, the tray that is open during power up must be the one specified in the Duplex IPDS job.</li> <li>Gray patterns consisting of hatching might not be shown in the printout. Instead the gray pattern was just a black box.</li> <li>If a host prematurely terminates an IPDS session with the Printer, subsequent IPDS jobs cannot be printed. The data-in LED will just blink. Though any premature termination of an IPDS session could cause the problem, testing has shown that the problem was most likely to occur if the IPDS session was terminated mid-job.</li> <li>The IPDS printing process does not terminate correctly. The device would then stall if a job of another PDL was submitted.</li> </ol>
4.744	<p>Symptom corrected:</p> <ol style="list-style-type: none"> <li>Any font that is not in CFF "Compact Font Format", will not be printed in IPDS jobs.</li> <li>If the machine jams while printing the IPDS font list, it can be made to stall by either of the following operations:                             <ul style="list-style-type: none"> <li>Try to print the IPDS font list again.</li> <li>Try to print any IPDS job.</li> </ul> </li> </ol> <p>Other changes: The following functions are now supported.</p>

**Reissued: 20-Jul-12**

Model: Model AI-P1	Date: 21-Apr-08	No.: RG179009g
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Version	Modified Points or Symptom Corrected
	<ul style="list-style-type: none"><li>- DBCS (Double Byte Character Sets)</li><li>- IMB (IntelligentMail Barcodes)</li></ul>
4.739	Symptom corrected: <ol style="list-style-type: none"><li>1. The simplex pages of mixed simplex/duplex IPDS jobs will be printed on the wrong side of the page. This problem has been fixed by adding a new printer bit switch: Bit Switch#4-3<ul style="list-style-type: none"><li>- Bit Switch#4-3 = 1: Simplex pages of IPDS jobs will be printed on the front side of the page.</li><li>- Bit Switch#4-3 = 0: Simplex pages of IPDS jobs will be printed on the back side of the page.</li></ul></li><li>2. IPDS jobs that contain the PFC (Presentation Fidelity Control) command cannot be stapled.</li></ol>
4.732	Symptom Correction SC997 is generated when paper jam occur.
4.731	1st Mass production

Reissued: 09-Oct-09

Model: AL-P1	Date: 23-May-08	No.: RG179010b
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**RTB Reissue**

The items in ***bold italics*** have been corrected or added.

Subject: IPDS Option Release		Prepared by: K. Hamada	
From: 2nd Tech Support Sec. Service Support Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input checked="" type="checkbox"/> Other ( )	<input checked="" type="checkbox"/> Tier 2

**Installation Procedure for the IPDS Option  
When Used on the Model AL-P1**

The IPDS option will be released in June 2008. The installation procedure for this option on the Model AL-P1 is shown below.

**IPDS OPTION**

**Accessories**

Description	Q'ty
1. IPDS Emulation SD Card .....	1

**Important:** Only one Slot 1 is available for SD cards that contain applications. If you want to use more than one application, merge all applications into one SD card (SP5873-001).

**Installation**

1. Make sure the following requirements have been met.

**Requirements:**

- ***The Hard Disk Drive Option Type 5000 must be installed.***
- **The following firmware versions must be installed:**

Firmware Name	Version	Firmware Number
System	<b>V1.08 or later</b>	G1795740B
NCS	<b>V7.14 or later</b>	G1795742B
Websys	<b>V1.12 or later</b>	G1795743B
Printer	<b>V1.08 or later</b>	G1795746B

2. Turn OFF the main switch.

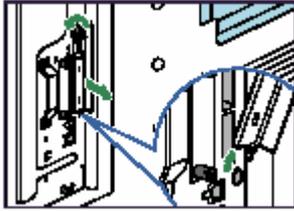
Reissued: 09-Oct-09

Model: AI-P1

Date: 23-May-08

No.: RG179010b

- Loosen the screw and remove the SD card slot cover at an angle (⌀ x 1).



- Insert the IPDS SD Card into **Slot 1 (Upper slot)** until it clicks.

**Important:**

- Pushing on the SD Card releases it for removal. Make sure the SD card is inserted and locked in place. If it is partially out of the slot, push it in gently until it locks in place.
- If Slot 1 (upper slot) is occupied, insert the attached SD card into Slot 2 (lower slot) and the IPDS SD card into Slot 1. Then, merge the application into the IPDS SD card.

- Reattach the cover and turn ON the main switch.
- Do the following setting "A" or "B" to enable the IPDS function.

**A. [Enable the IPDS function via telnet]**

- Connect the machine via telnet.
- Execute the following commands:

```
msh> set ipds up
```

\*\*\*If you want to stop the function.

```
msh> set ipds down
```

**B. [Enable the IPDS option via WebImageMonitor]**

- Log in to WebImageMonitor.
- Change the setting to enable IPDS.

Model: Model AI-P1		Date: 3-Jun-08	No.: RG179011
Subject: SC866(SD card error 1)		Prepared by: K. Hamada	
From: 2nd Tech Support Sec. Service Support Dept.			
Classification:	<input checked="" type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ( )	<input type="checkbox"/> Tier 2

**SYMPTOM**

SC866 (SD Card Error 1: Confirmation) occurs when installing an SD card option if the System firmware is older than Ver1.08.

**CAUSE**

Due to a firmware bug (System), the machine cannot authenticate the SD card.

**Note:** There is nothing wrong with the SD card or application itself. The problem is with the System/Copy firmware.

**SOLUTION**

If you want to install an SD card option, update the System firmware to **Ver1.08 (G1795740B)** or later before you install the option.

**SD Card Options**

The symptom may occur when you install any of the following options on machines that contain System firmware older than Ver1.08.

Option Name	Code
IPDS Unit Type 5100	M345-05
VM Card Type G	M345-13/19/20
SD Card for Fonts Type B	M345-24

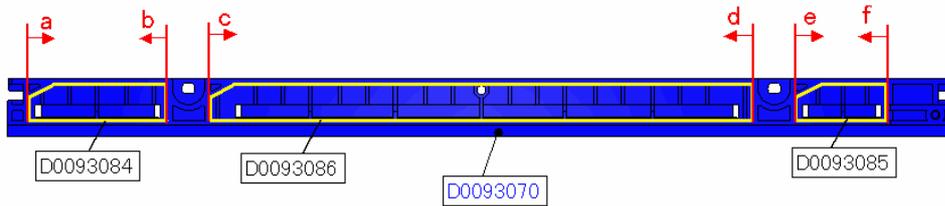
Model: AL-P1		Date: 17-Aug-09	No.: RG179012
Modified Article: Filter		Prepared by: K. Hamada	
From: 2nd Tech. Support Sec. Service Support Dept.			
Reason for Modification:	<input type="checkbox"/> Parts catalog correction	<input type="checkbox"/> Vendor change	<input type="checkbox"/> Other
	<input type="checkbox"/> To facilitate assembly	<input checked="" type="checkbox"/> To improve reliability	<input type="checkbox"/> To meet standards ( )
	<input type="checkbox"/> Part standardization	<input type="checkbox"/> Product Safety	

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
D0093083	D0093086	Development filter	1-1	X/X	26	25	A
D0093150	D0093152	Entrance Seal Ass'y	1-1	X/X	26	30	A
D0093065	D0093070	Upper cover – Development unit	1-1	X/X	26	23	A
	D0093084	Development filter: front	0-1		26	34	A
	D0093085	Development filter: rear	0-1		26	35	A

**Change:** The shape of the filter and cover were changed.

**Reason:** To further improve the sealing of the development unit.

**Note A:** When you replace new parts together as a set, the interchangeability is **X/O**.



Model: AL-P1		Date: 8-Sep-09	No.: RG179014
Subject: Duplex jam or Z-fold jam		Prepared by: K. Hamada	
From: 2nd Tech Support Sec. Service Support Dept.			
Classification:	<input checked="" type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ( )	<input checked="" type="checkbox"/> Tier 2

This RTB applies only to the **Model AI-P1**.

**SYMPTOM**

A duplex jam or Z-fold jam may occur if a duplex print job is performed

**Note:**

- This symptom has a greater tendency to occur under low-temperature conditions.
- Once the symptom occurs, it will continue to occur.

**CAUSE**

The motor torque of duplex bypass motors from a specific lot was higher than the specification maximum. This increased the level of vibration during motor rotation, which led to resonance when the vibration reached a certain frequency. Eventually, this caused the motor to disengage and rotate in idle.

**SOLUTION**

**Production line**

The following changes were made from June 2009 production of the Model AI-P1 mainframes:

1. Wheels were added to the motor pulley to minimize resonance as a provisional countermeasure.
2. An extra check was added to further ensure that the motor torque does not exceed the specification maximum and change to the new parts number as a permanent countermeasure.

**Note:** The motor after the above additional check does not contain additional wheel in note 1 above.

**Action requirement in the field**

Replace the duplex bypass motor with the following new part: **P/N B2232745**

Model: AL-P1	Date: 8-Sep-09	No.: RG179014
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**Affected Units**

This issue affects the following Model AI-P1 mainframes:

<b>Model Name</b>	<b>Code</b>	<b>Serial Number</b>
AI-P1	G179-11	(No affected units)
	G179-17	(No affected units)
	G179-22	S3796400001 to S3796400034
	G179-27	S3796400035 to S3796500381

**Reissued:19-Oct-09**

Model: AL-P1	Date: 01-Sept-09	No.: RG179013a
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**RTB Reissue**

The chapter "Installation of Card Authentication Package " and "Updating Enhanced Locked Print NX Application and Filter" have been modified.

Subject: Card Authentication Package V1.3 Installation / Activation Guide		Prepared by: K. Hamada	
From: 1st Tech. Support Sec. Service Support Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input checked="" type="checkbox"/> Other (     )	<input checked="" type="checkbox"/> Tier 2

This RTB has been issued to announce the Card Authentication Package V1.3 Installation / Activation Guide release information.

# Installation

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## Overview

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There are several combinations for using "Card Authentication Package" and "Enhanced Locked Print NX".

- **Embedded Type A:** This is for a customer who wants to use "Card Authentication Package" and "Enhance Locked Print NX".
- **Embedded Type B:** This is for a customer who wants to use only "Card Authentication Package".
- **Server Type A:** This is for a customer who wants to use "Card Authentication Package Enterprise Server" and "Enhance Locked Print NX".
- **Server Type B:** This is for a customer who wants to use only "Card Authentication Package Enterprise Server".

Here is the matrix of possible combinations.

	<b>Embedded Type A</b>	<b>Embedded Type B</b>	<b>Server Type A</b>	<b>Server Type B</b>
CAP	Yes	Yes	Yes	Yes
CAP-ES	No	No	Yes	Yes
ELP-NX	Yes	No	Yes	No

- CAP: Card Authentication Package
- CAP-ES: Card Authentication Package Enterprise Server
- ELP-NX: Enhanced Locked Print NX (Application and Filter)

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## Confirmation Points before Installation

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- Make sure that the firmware of the **target machine** is the latest version.
- Make sure that the firmware of the **VM card** is the latest version.
- Check the following SP settings;
  - Bit 0 of SP5401-160 (SSP: Super Service Program) must be set to "0".
  - All bits of SP5401-162 (Extend Certification Detail) must be set to "0".
  - Bit 0 of SP5401-230 (Customized Authentication) must be set to "0".

## Installation of Card Authentication Package

### "Working with the Machine"

1. Install a card reader device in a suitable location.
2. Connect the USB cable from the card reader device to the USB slot of the target machine.

**Note**

- The position of the USB slot may vary depending on the machine.

3. Secure the cable clamp to the USB slot.
4. Install the VM card in the service slot of the target machine.
5. Turn on the target machine.

### "Working with the PC"

6. Prepare the applications related to the "Card Authentication Package" and "Enhanced Locked Print NX Package" on your PC.
7. Unzip the zip file of the "D4890001.zip" and "D4900001.zip".
8. Open the "readme.html" from each unzipped file.

<CAP>

Device Name	SD Image	Remote Install Image
Aficio MP 2550 / 2550B / 3350 / 3350B		
Aficio MP 4000 / 4000B / 5000 / 5000B	<a href="#">sd_image</a>	<a href="#">remote_installer</a>
Aficio MP C2050 / C2550		
Aficio MP C6000 / C7500		
Aficio MP C2800 / C3300	<a href="#">sd_image</a>	<a href="#">remote_installer</a>
Aficio MP C4000 / C5000		
Aficio MP 6001 / 7001 / 8001 / 9001		
Aficio MP 171	<a href="#">sd_image</a>	<a href="#">remote_installer</a>
Aficio SP 8200DN	<a href="#">sd_image</a>	<a href="#">remote_installer</a>
Aficio SP C420DN	<a href="#">sd_image</a>	<a href="#">remote_installer</a>
Aficio SP C820DN / C821DN	<a href="#">sd_image</a>	<a href="#">remote_installer</a>

<ELPNX>

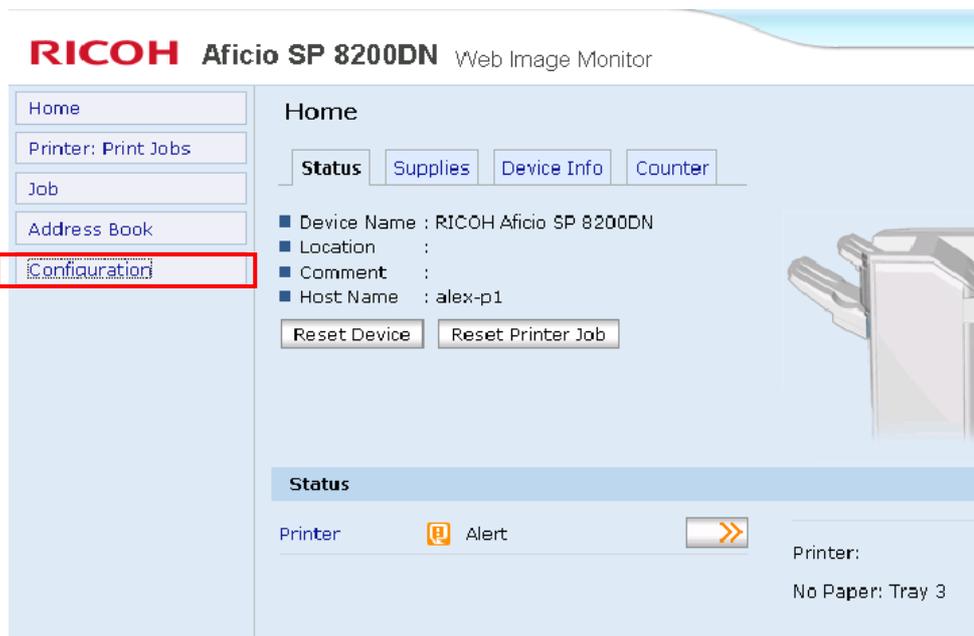
Device Name	SD Image	Remote Install Image
Aficio MP 2550 / 2550B / 3350 / 3350B		
Aficio MP 4000 / 4000B / 5000 / 5000B	<a href="#">sd_image</a>	<a href="#">remote_installer</a>
Aficio MP C2050 / C2550		
Aficio MP C6000 / C7500		
Aficio MP C2800 / C3300	<a href="#">sd_image</a>	<a href="#">remote_installer</a>
Aficio MP C4000 / C5000		
Aficio MP 6001 / 7001 / 8001 / 9001		
Aficio MP 171	<a href="#">sd_image</a>	<a href="#">remote_installer</a>
Aficio SP 8200DN	<a href="#">sd_image</a>	<a href="#">remote_installer</a>
Aficio SP C420DN	<a href="#">sd_image</a>	<a href="#">remote_installer</a>
Aficio SP C820DN / C821DN	<a href="#">sd_image</a>	<a href="#">remote_installer</a>

9. Click the "remote installer" of the target machine
10. Copy the zip file of each application on your PC

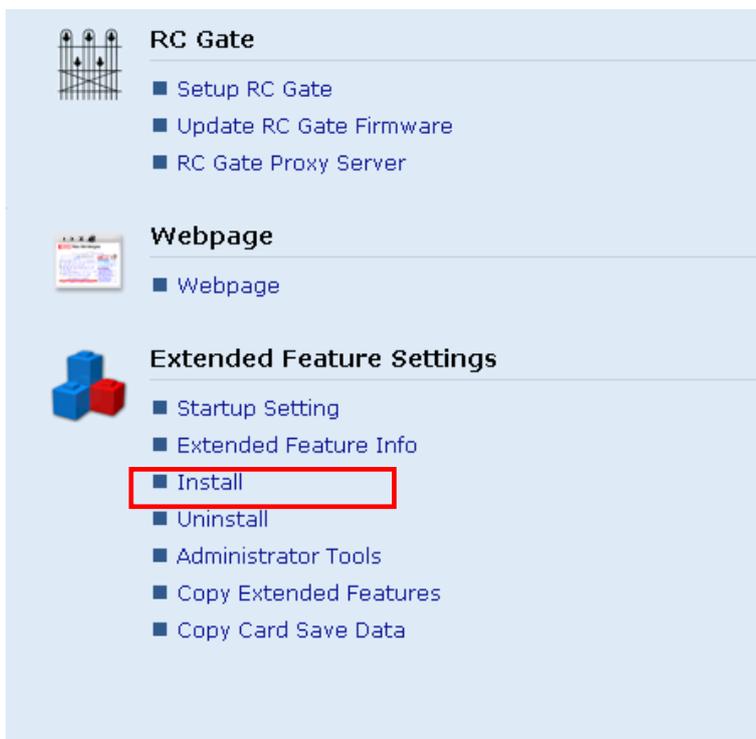
- Please refer to the following for the location of the application folder.

Model Name	Product Code	Application Name	Application Folder	File Name
Model AL-P1	G179	CAP	/03_lp/web_installer/	cap_install.zip
		ELP Application	/01_mips/03_lp/web_installer/	elpnx_lp_install.zip
		ELP Filter		100732416.mod

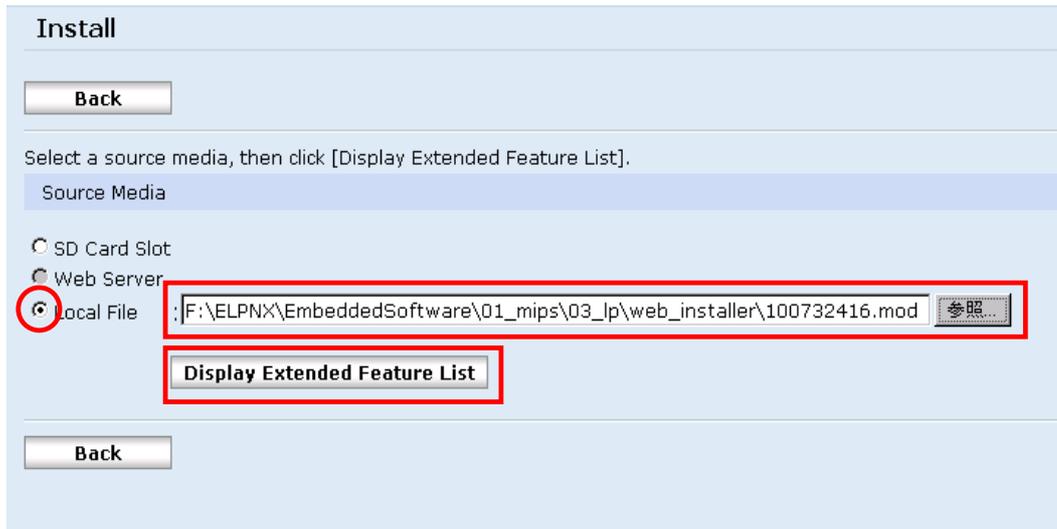
11. Run the Web Image Monitor for the target machine.
12. Ask a machine administrator to login to the target machine with the login name and password of the machine's administrator.



13. Press "Configuration" in the main display.



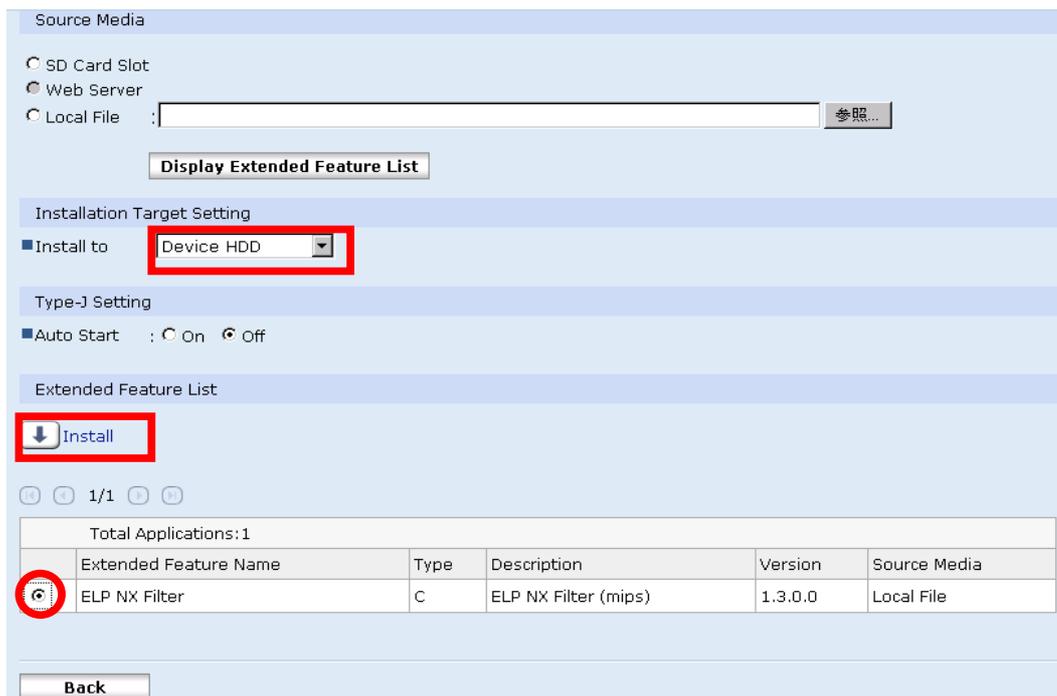
14. Press "Install".



15. Select “Local File” button and select a SDK application file that you want to install then press “Display Extended Feature List”

**Note**

Make sure that the correct application file name and folder.  
Please refer to the table on page 3.



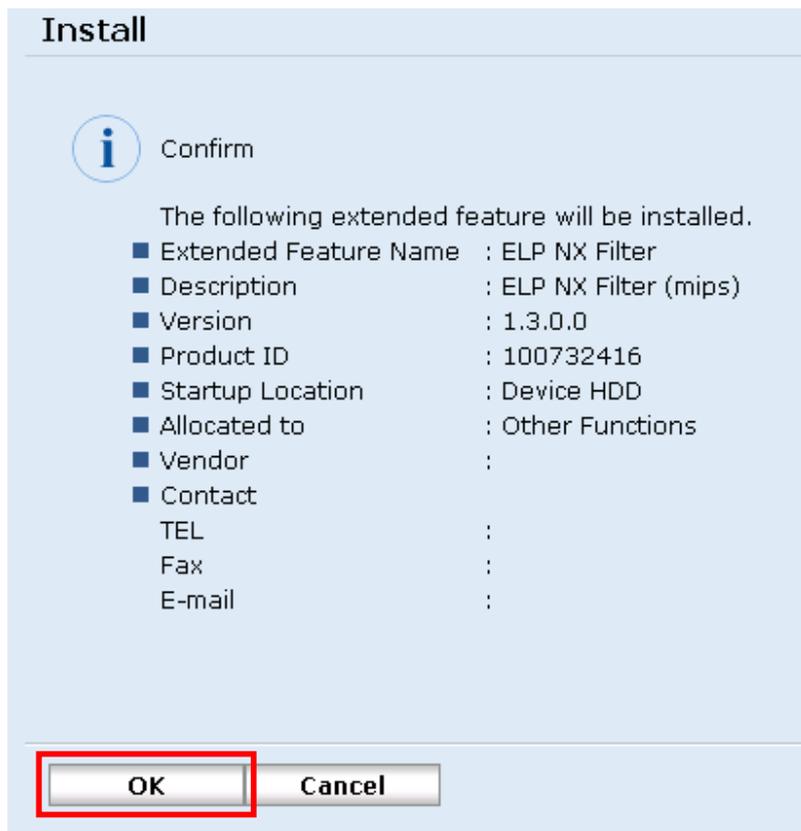
16. Select the destination of the installed SDK application.

The following table shows the destination of the installed SDK application.

Application	Destination
Card Authentication Package	SD Card
Enhanced Locked Print NX Application	SD Card
Enhanced Locked Print NX Filter	HDD

17. Press the radio button of the SDK application that you want to install.

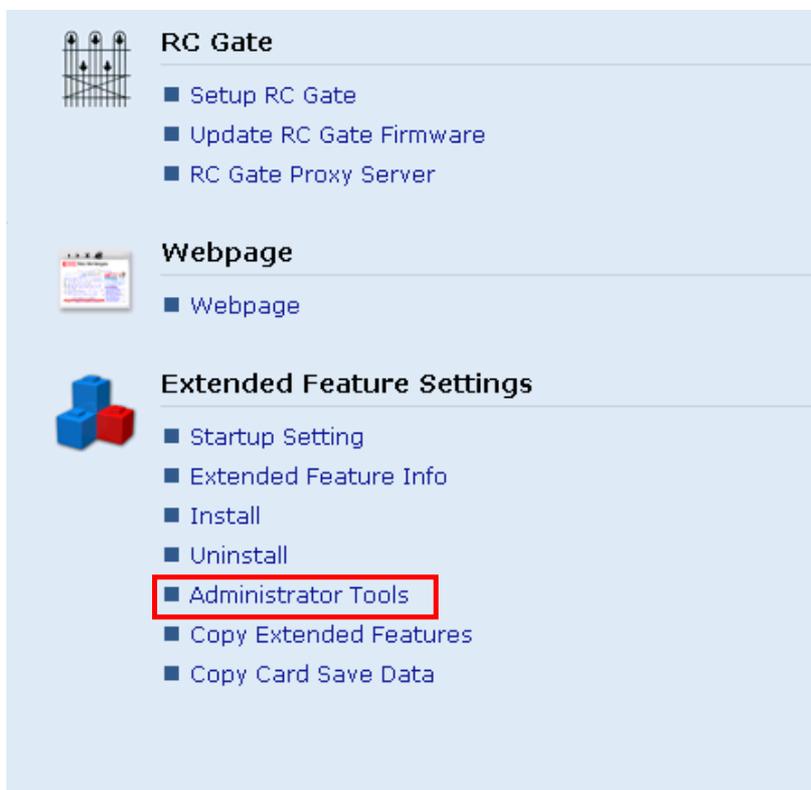
18. Press "Install".



19. Check the information for the installed SDK application.

20. Press "OK" to complete this installation.

21. If you want to install other SDK application, perform from step 15.



22. Press "Administrator Tools" in the mail view.

Heap / Stack Size Settings

■ Heap Size :  MB (2 - 16 MB)

■ Stack Size :  KB (32 - 64 KB)

■ Memory Status

System Memory : Free (Total: )

Heap : Free (Total: )

**Apply** **Back**

23. Input an appropriate value of the Heap size (see the table below) then press "Apply".

Required heap size for the "Copy Extended Feature" depends on a combination of installed applications. For details, refer to the table below.

CAP	ELP-NX	GlobalScan NX	Required Heap Size
Yes	-	-	8 MB
Yes	Yes	-	16 MB
Yes	Yes	Yes	16 MB
Yes	-	Yes	16 MB

24. Turn the target machine off and on.

### ***"Working with the PC"***

25. Activate the "Card Authentication Package" and "Enhanced Locked Print" (if it is installed) with the Remote Manager.

#### **Note**

- For details, see "DSDK Application Installation" in the "Embedded Software Remote Manager Installation/Activation Guide".

**The following steps from 26 to 34 should be done by a machine administrator.**

26. Configure the card reader settings with the Card Authentication Package Web UI.

27. Run the Web Image monitor for the target machine.

28. Login to the target machine with the login name and password of the machine's administrator.

## 29. Select "Address Book"

**Address List**

**Back**

 **Change**  **Add User**  **Add Group**  **Delete**  **Maintenance**

View:  Search for:

1/2 Page :  **Go** Display Items :  Number of Regi

	Registration No.	Name	Freq.	Title 1	Title 2	Title 3	User Code	Fax Destination
	00001	asomura	On	---	---	---	asomura	---
	00002	masa	On	OPQ	---	---	masa	---

## 30. Select Registration No. and press "Change".

**Authentication Information**

■ User Code :

■ SMTP Authentication :  Specify Other Auth. Info below:  Do not Specify

    Login User Name :

    Login Password :  **Change**

■ Folder Authentication :  Specify Other Auth. Info below:  Do not Specify

    Login User Name :

    Login Password :  **Change**

■ LDAP Authentication :  Specify Other Auth. Info below:  Do not Specify

    Login User Name :

    Login Password :  **Change**

■ Available Functions

    Copier:  Full Color  Two-color  Single Color  Black & White

    Color Copy Mode Limitation:  Limit to Auto Color Selection  Full Color / Auto Color Selection

    Printer:  Color  Black & White

    Other functions:  Document Server  Facsimile  Scanner  **JavaTM/X**

## 31. Select "JavaTM/X" and press "OK".

## 32. Turn the target machine off and on.

# Uninstallation

---

## Uninstalling Card Authentication Package

---

1. Turn on the target machine.
2. Deactivate "Card Authentication Package" and "Enhanced Locked Print-NX Application" with the Remote Manager. For details, see "Deactivation" in the "Embedded Software Remote Manager Installation/Activation Guide".

**★ Important**

Before uninstalling activated SDK applications, deactivation must be done. Otherwise, the product key will be wasted.

3. Uninstall the SDK applications which you want to remove, except for the Java VM application, with the operation panel or Web Image Monitor.
4. Turn the target machine off and on.
5. Uninstall the Java VM application with the operation panel or Web Image Monitor..
6. Change the following SP settings.
  - Bit 0 of SP5401-160 (SSP: Super Service Program) must be set to "0".
  - All bits of SP5401-162 (Extend Certification Detail) must be set to "0".
  - Bit 0 of SP5401-230 (Customized Authentication) must be set to "0".
7. Turn off the target machine, and then remove the VM card from the target machine.

# Remote Updating Procedure

---

## Updating Card Authentication Package

---

**★ Important**

First update the Java VM Platform if the Java VM Platform and Card Authentication Package are supposed to be updated at the same time.

1. Ask a machine administrator to disable the Card Authentication Package with the operation panel.

**↓ Note**

- Disable other Card Authentication Packages if they have been installed in the machine.
- You can also disable the Card Authentication Package with the web image monitor.

2. Launch the Remote Manager.
3. Add a Card Authentication Package for updating in the Remote Manager

**↓ Note**

See the "Adding a Card Authentication Package in the "Remote Manager" sub section of the "Card Authentication Package Installation" section of the Remote Manager Operation Guide.

4. Install the Card Authentication Package for updating in the target machine

**↓ Note**

See the "Installing the Card Authentication Package in the Target Machine" sub section of the "Card Authentication Package Installation" section of the Remote Manager Operation Guide.

5. Turn off and on the target machine.
6. Ask a machine administrator to check if the version of the Card Authentication Package is updated and if the installed Card Authentication Package is "Starting Up"

## Updating Enhanced Locked Print NX Application and Filter

### Enhanced Locked Print NX Application

1. Prepare the applications related to the “Enhanced Locked Print NX Package” on your PC.
2. Unzip the zip file of the “D4900001.zip”.
3. Open the "readme.html" from unzipped file.

#### RICOH:

Device Name	SD Image	Remote Install Image
Aficio MP 2550 / 2550B / 3350 / 3350B		
Aficio MP 4000 / 4000B / 5000 / 5000B	<a href="#">sd_image</a>	<a href="#">remote_installer</a>
Aficio MP C2050 / C2550		
Aficio MP C6000 / C7500		
Aficio MP C2800 / C3300	<a href="#">sd_image</a>	<a href="#">remote_installer</a>
Aficio MP C4000 / C5000		
Aficio MP 6001 / 7001 / 8001 / 9001		
Aficio MP 171	<a href="#">sd_image</a>	<a href="#">remote_installer</a>
Aficio SP 8200DN	<a href="#">sd_image</a>	<a href="#">remote_installer</a>
Aficio SP C420DN	<a href="#">sd_image</a>	<a href="#">remote_installer</a>
Aficio SP C820DN / C821DN	<a href="#">sd_image</a>	<a href="#">remote_installer</a>



4. Click the “remote installer” of the target machine
5. Copy the zip file of each application on your PC

- Please refer to the following for the location of the application folder.

Model Type	Product Code	Application Folder	File Name
Model AL-P1	G179	/01_mips/03_lp/web_image/	elpnx_lp_install.zip

7. Ask a machine administrator to disable the ELP NX application using Web Image Monitor.
8. Login to the ELP Administrative Tool.
9. Export the system configuration file.

#### Note

See the “Exporting/Importing the System Configuration File” section of the “ELP Administrator’s Guide.”

10. Uninstall the ELP NX Filter using the Remote Manager.
11. Install the new version (the update) of the ELP NX Filter using Remote Manager.
12. Reissue the product license using Remote Manager.
13. Store the obtained product license in the target machine using Remote Manager.

#### Note

For details about steps from 10 to 13, see the “Uninstallation Procedure” section of the “Remote Manager Operation Guide.”

14. Import the system configuration file.

#### Note

See the “Exporting/Importing the System Configuration File” section of the “ELP Administrator’s Guide.”

15. Turn the main power of the target machine OFF/ON.
16. Ask a machine administrator to confirm that the ELP NX application has been

successfully updated to the target version, and that this application is operating normally.

### **Enhanced Locked Print NX Filter**

The update procedure is the same as the installation procedure (see page 3 of this document).

## Appendix

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### Matrix of Available Installation/Activation Tools

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	Installation Destination	Action	WIM	Remote Manager	SD Card
CAP	Target Machine	Installation	Yes	Yes	No
		Activation	No	Yes	No
		Version Up Activation	Yes	Yes	No
CAP-ES	Server	Installation	No	No	No
		Activation	No	No	No
ELP-NX APP	Target Machine	Installation	Yes	Yes	No
		Activation	No	Yes	No
		Version Up Activation	Yes	Yes	No
ELP-NX Filter	Target Machine	Installation	Yes	No	No
		Activation	-	-	-
		Version Up Activation	Yes	No	No

- CAP: Card Authentication Package Embedded Type
- CAP-ES: Card Authentication Package Server Type
- ELP-NX APP: Enhanced Locked Print - NX Application
- ELP-NX Filter: Enhanced Locked Print - NX Filter
- WIM: Web Image Monitor
- -: Not necessary

---

### Installation File Types

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#### SD Card

---

- Unzipped folder of each application

#### Remote Manager

---

- Zip file of each application

#### Web Image Monitor

---

- All applications except ELP-NX Filter: Zip file (same as RM)
- ELP-NX Filter: Unzipped folder in the /sdk/webinstaller folder.

Model: AL-P1		Date:21-Dec-09	No.: RG179015
Subject: Dirty Background		Prepared by: K. Hamada	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input checked="" type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ( )	<input type="checkbox"/> Tier 2

**SYMPTOM**

Dirty background sometimes appears.

**CAUSE**

When one of the following conditions is met, the chargeability of the toner is decreased, and the machine responds by increasing the toner concentration (TC). As a result, toner filming on the development roller is accelerated, and the poorly-charged toner is easily transferred onto the non-image areas of the OPC surface.

- Low humidity and low temperature conditions
- High print volume
- High one-to-one print jobs
- High image coverage
- High paper dust content in recycled toner

**SOLUTION**

**Production:**

The toner was modified to minimize a decrease in chargeability under the conditions listed above.

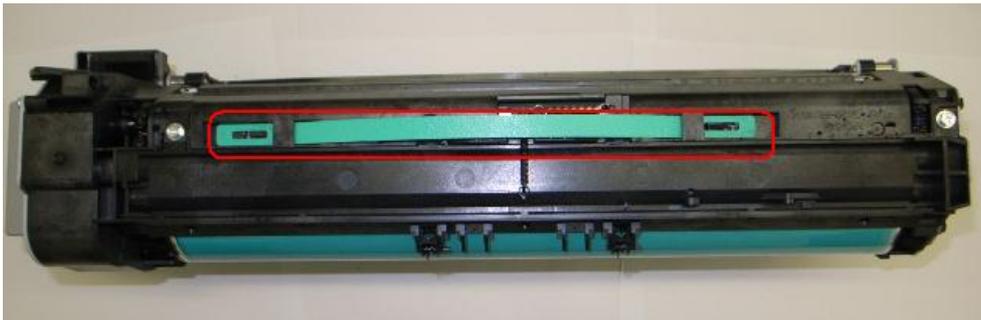
**Note:** The modified toner has a lot number that ends in **suffix A**.

**Action In The Field:**

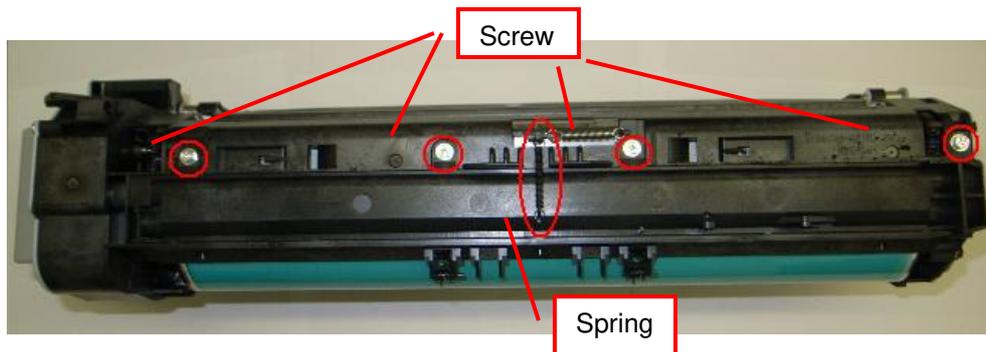
If the symptom is reported, do the following four procedures.

**I. Cleaning the pathway for recycled toner inside the PCDU**

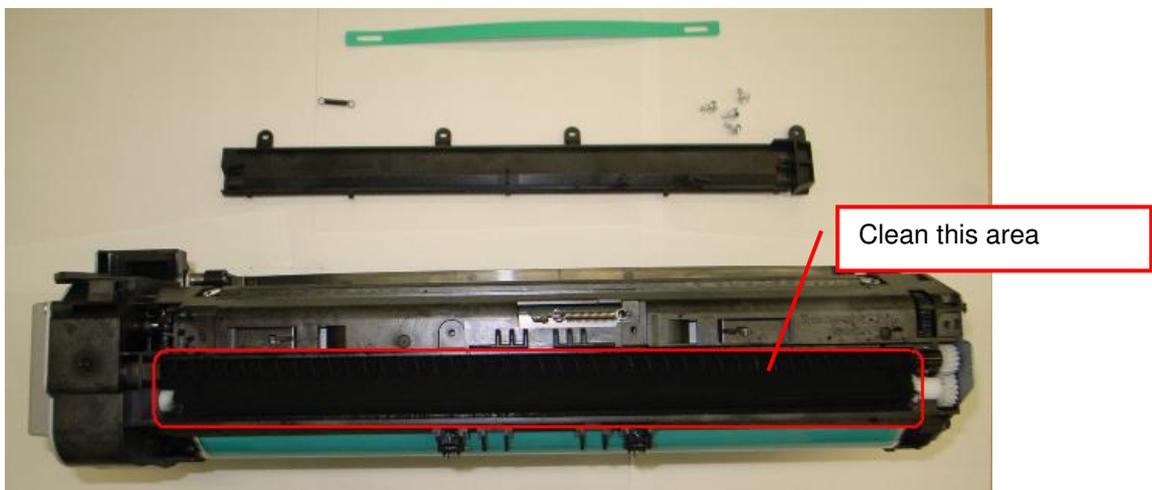
1. Turn the machine main power OFF.
2. Remove the PCDU.
3. Remove the green handle.



4. Remove 4 screws and 1 spring.



5. Remove the upper cover then clean out the recycled toner with a vacuum cleaner.



6. Re-attach all removed parts.

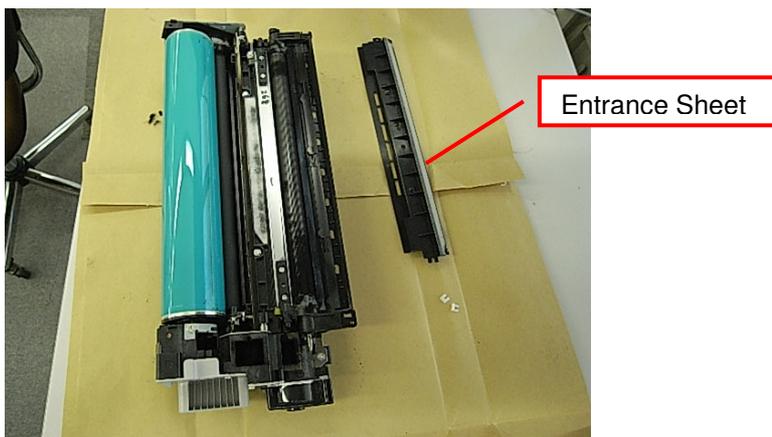
**II. Cleaning the development roller surface**

**IMPORTANT:** You do not need to replace the development roller. This symptom can be solved by performing the four procedures in this RTB.

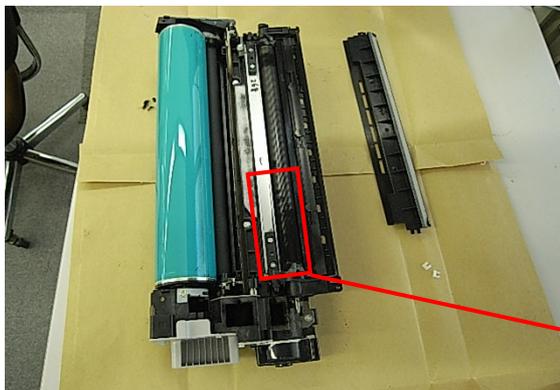
1. Remove the two screws and open the PCDU as shown below.



2. Remove the entrance sheet (Clip x 2).

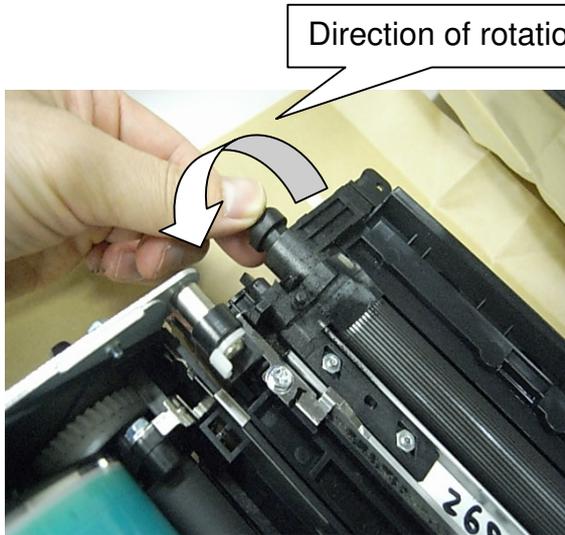


3. Fold up a sheet of copy paper to fit the width of the uncovered area of the development roller, as shown below.
4. Slide the paper along the length of the roller to clean the toner off the surface.



Model: AL-P1	Date:21-Dec-09	No.: RG179015
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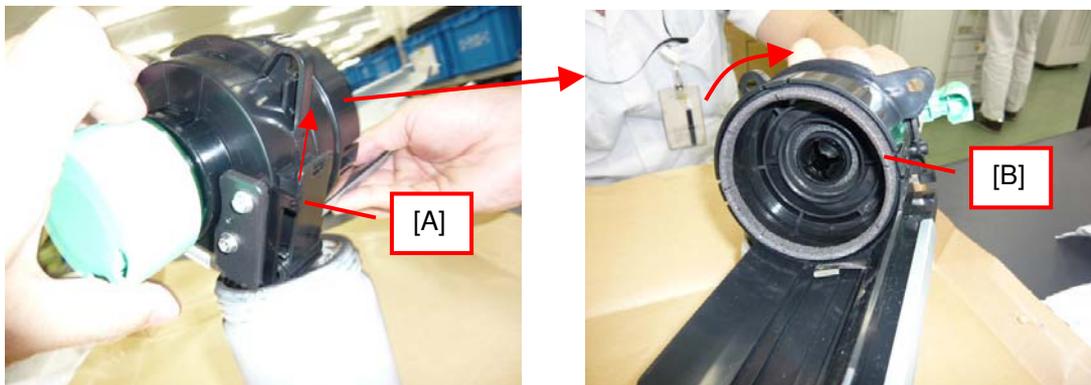
5. Rotate the development roller in the direction of the arrow until the section you cleaned is no longer visible. Repeat Step 4 for this section of the roller surface.
6. Repeat Steps 4 and 5 until you have cleaned the entire surface of the roller.



7. Reassemble the PCDU and install the PCDU into the machine.

**III. Removing toner from the toner supply unit**

1. Remove the toner supply unit.
2. Lift the shutter [A] up and turn the inner plastic parts [B] in the direction as shown below until all toner comes out from the unit.



3. Re-install the toner supply unit and set the new toner bottle.
4. Turn the main switch on.

Model: AL-P1

Date:21-Dec-09

No.: RG179015

**IV. Set the following SP modes to the values shown.**

SP Mode:

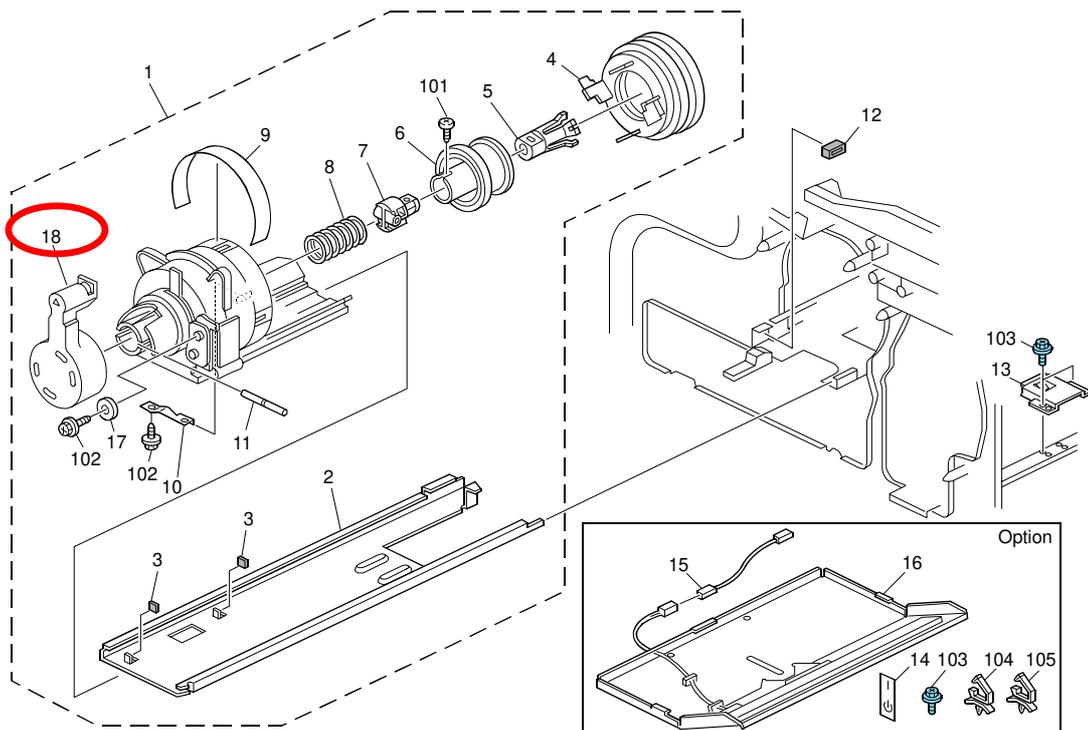
Set to this value:

**SP 2201-01** (Development Bias):**560(default)****SP 2201-02** (Development Bias for ID sensor pattern):**400(default)****Note:** For high-CV users (APV: 30K or more), set this SP to a value of **460**.**SP 2001-01** (Charge Roller Bias):**1500(default)**

Model: AL-P1		Date: 12-Feb-10	No.: RG179016
Subject: Toner Handle		Prepared by: K. Hamada	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input checked="" type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ( )	<input type="checkbox"/> Tier 2

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
	D0093264	Cam: handle	0-1	-	25	18	

**Change/ Reason:** This part is added due to a field request.



**Reissued:29-Nov-10**

Model: AL-P1	Date: 22-Nov-10	No.: RG179017a
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**RTB Reissue**

The items in ***bold italics*** were corrected or added.

Subject: MAC Address Change Notification		Prepared by: T.Hirakawa	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input checked="" type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ( )	

**MAC Address Change Notification**

**Overview:**

- The number of available MAC address codes used on Ricoh MFP/LPs has been depleted. Therefore, a new vendor code has been assigned to all affected models.
- The part number of the PCB used on the G179 was changed as follows:

Old Part Number	New Part Number	Description	I/C
G1795706	G1795716	Controller: PCB for G179	X/O

**NEW MAC address affected:**

Model	Code	Production Line
<b><i>AI-P1</i></b>	G179-11,17,22,27	Nov/2010 at RAI

**Connection issues and solutions:**

- MFP/LPs that use the new MAC address have connection issues with the following Ricoh software products:

**SmartDeviceMonitor for Admin/SmartDeviceMonitor for Admin V8/Accounting Report Package**

1. The User Management Tool and the Addressbook Management Tool do not work.
2. Printing jobs and machine status cannot be reset.
3. The MFP/LP's NIB password cannot be changed.
4. The NIB Setting Tool does not work.

**SmartDeviceMonitor for Client / DeskTopBinder SmartDeviceMonitor for Client**

Automatic protocol/port number specification does not work when adding the SmartDeviceMonitor port.

**Reissued:29-Nov-10**

Model: AL-P1	Date: 22-Nov-10	No.: RG179017a
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**Web Smart DeviceMonitor**

The device is detected as another vendor's product.

**RC Gate S**

The device is detected as another vendor's product.

- The issues described above have been resolved by the following update versions, which have already been released to the field. If any of these issues occur, update to the following version(s) or newer:

Product Name	Version	Web Release date *
SmartDeviceMonitor for Admin V7	V7.4.3.0	Oct. 23, 2009
DeskTopBinder SmartDeviceMonitor for Client	V8.7.5.0	Oct. 23, 2009
DeskTopBinder lite	V5.4.1.1	Nov. 06, 2009
Web SmartDeviceMonitor	V02.07.00-04	Dec. 25, 2009
RC Gate S	V01.01.03	Dec. 10, 2009
SmartDeviceMonitor for Admin V8	V8.1.1.0	Nov. 06, 2009
SmartDeviceMonitor Accounting Report Package	V1.1.1.0	Nov. 06, 2009

**Other important notes:**

- The controller firmware was also modified in order to support both the old and new MAC addresses. Firmware version **1.16** and newer support the MAC addresses, but an SC error may occur if the old firmware is installed on a PCB with the new MAC address.
- PCBs that contain the old MAC address will still be available under the following P/N, but the quantities are **very limited**. Therefore, only order this board **if the customer needs to continue using the old firmware** (such as a customized version of firmware) when the PCB breaks.

Model	Part Number	Description
AI-P1	G1795726	Controller: PCB for G179

For regular parts replacement, please order the board containing the new MAC address, and advise the customer to update the utility as necessary.

**Reissued:21-Dec-10**

Model: AL-P1	Date: 17-Dec-10	No.: RG179018a
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**RTB Reissue**

The items in ***bold italics*** were corrected or added.

Subject: Service manual correction		Prepared by: T.Hirakawa	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input checked="" type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ( )	<input type="checkbox"/> Tier 2

**Service Manual Revision**

The areas in **bold** were corrected.

**Service Program Mode tables pg.220**

2109	Test Pattern	
	<p>Use this SP to select a print test pattern.</p> <ol style="list-style-type: none"> <li><b>1. Access Service Program (SP) Mode.</b></li> <li><b>2. Access Engine Mode and select SP2-109-001.</b></li> <li><b>3. Select the number for the test pattern that you want to print.</b> <b>Important: Do not exit Engine Mode.</b></li> <li><b>4. Select one of the modes from <i>SP5-990-001</i> to <i>-007</i>, depending on the number of pages you want to print out.</b></li> <li><b>5. Push "Execute".</b> <b>Note: After you exit Engine Mode, SP2-109-001 (test pattern) returns to a value of "0"</b></li> </ol>	
001	Pattern Selection	[0 to 24/0/1] Test pattern of the GAVD
	0:None 1:Vertical Line(1 dot) 2:Vertical Line(2 dot) 3:Horizontal Line(1 dot) 4:Horizontal Line(2 dot) 5:Grid Vertical Line 6:Grid Horizontal Line 7:Grid Pattern Small 8:Grid Pattern Large	13:Independent Pattern(3 dot) 14:Trimming Area 15:Hound's Tooth Check (Vertical) 16: Hound's Tooth Check (Horizontal) 17:Black Band (Horizontal) 18:Black Band (Vertical) 19:Checker Flag Pattern 20:Grayscale (Vertical Margin) 21:Grayscale (Horizontal Margin)

**Reissued:21-Dec-10**

Model: AL-P1		Date: 17-Dec-10	No.: RG179018a
	9:Argkle Pattern Small 10:Argyle Pattern Large 11:Independent Pattern (1 dot) 12:Independent Pattern (2 dot)	22:Two Beam Density Pattern 23:Full Dot Pattern 24:All White Pattern	
002	Density	[0 to 15 / 15 / 1]	Set the density of the test pattern which is output in SP2109-001.This SP is not used for the Grayscale patterns.

Reissued:13-Jun-11

Model: AL-P1	Date: 03-Mar-11	No.: RG179019a
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**RTB Reissue**

The items in ***bold italics*** were corrected or added.

Subject: Parts catalog correction		Prepared by: T.Hirakawa	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input checked="" type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ( )	<input type="checkbox"/> Tier 2

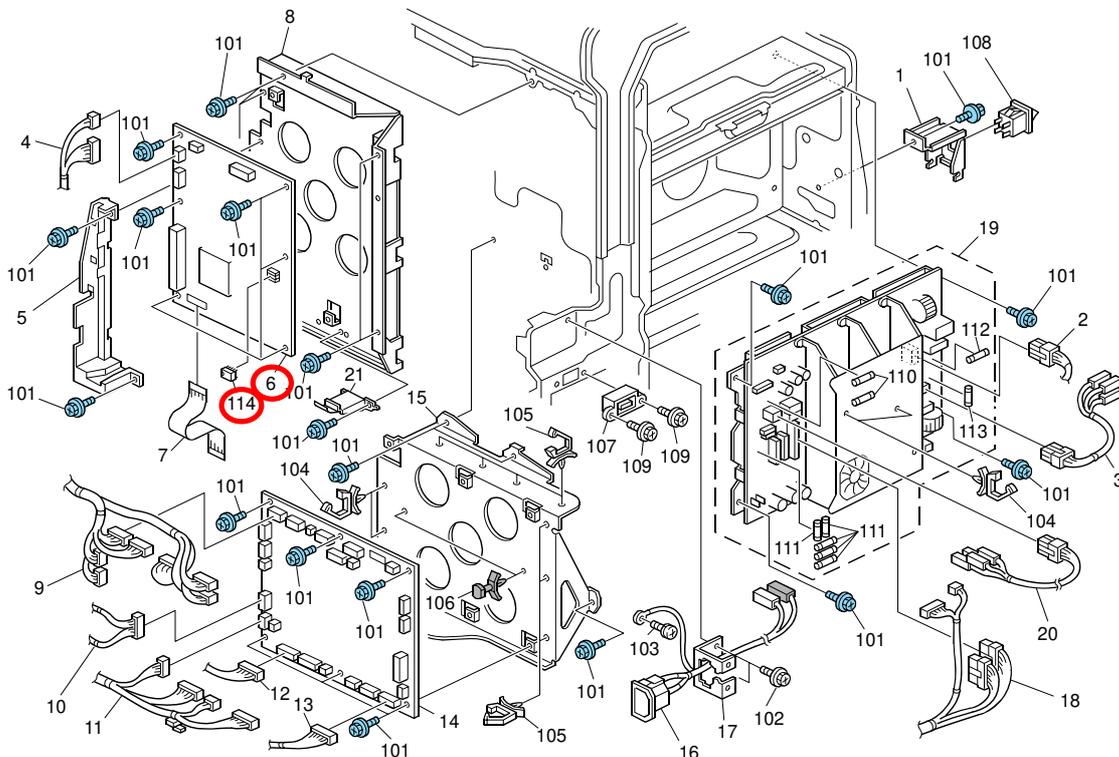
Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
-	14076362	EEPROM:BR24L64-W	0-1	-	69	114	
<b><i>G1795135</i></b>	<b><i>G1795136</i></b>	<b><i>PCB:BCU:AL-P1:ASS'Y</i></b>	<b><i>1-1</i></b>	<b><i>O/O</i></b>	<b><i>69</i></b> <b><i>93</i></b>	<b><i>6</i></b> <b><i>*</i></b>	

**Change:**

- 1) ***The EEPROM is no longer included with the BCU.***
- 2) ***Instead, the EEPROM was added as an individual service part.***
- 3) Index #114 (:EEPROM: BR24L64-W) was added to the illustration.

**Reason:**

- 1) ***Requests were received from the field.***
- 2) This information was missing from the Parts Catalog.



Model: AL-P1	Date: 01-Apr-11	No.: RG179020
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Subject: Service manual correction		Prepared by: T.Hirakawa	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input checked="" type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other (            )	<input type="checkbox"/> Tier 2

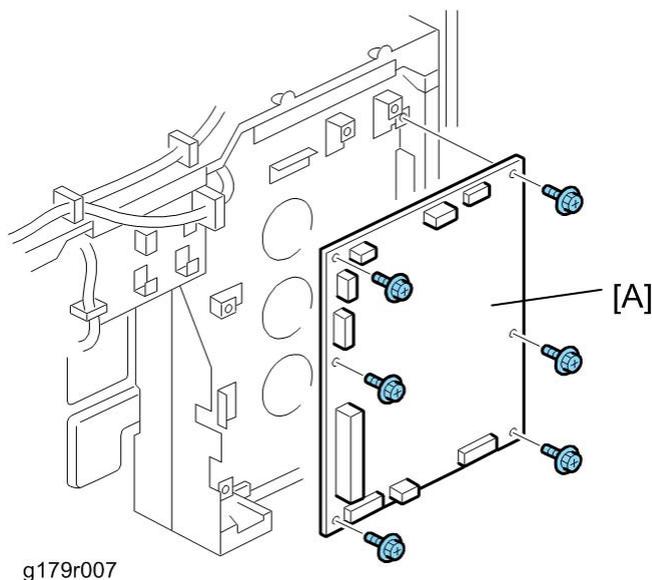
**Service Manual Revision**

The areas in **bold** were corrected.

“3.Replacement and adjustment” in the Service Manual (pg.144-145)

**BCU**

**1. Controller box (→ Mother Board)**



**2. BCU [A]** (🔩 x 6, 📁 x all)

**3. Remove the EEPROM from the old BCU.**

**4. If this EEPROM is working normally, attach it to the new BCU.**

**If it is defective, attach a new EEPROM to the new BCU.**

**5. Install the new BCU.**

Model: AL-P1		Date: 20-Apr-11	No.: RG179021
Subject: Parts information		Prepared by: T.Hirakawa	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input checked="" type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ( )	<input type="checkbox"/> Tier 2

**Change:** Some circuit elements on the PCB (PSU) were changed.

**Reason:** To improve reliability.

Old parts number	New parts number	Description	Q'ty	Int	Page	Index
AZ240141	<b>AZ240191</b>	POWER SUPPLY UNIT -230V	1/1	<b>O/O</b>	105	21

Target model codes:

AL-C1.5(EU): D029-92

AL-C1.5(AA): D091-29, D092-29

AL-C1.5 (CHN) - D091-21, D092-21

AL-C1(EU): D012-92, D013-92

AL-C1 (AA): D009-29, D011-29, D012-29, D013-29

AL-C1 (CHN): D009-21, D009-61, D012-21, D012-61

AL-C1 (KRE) - D009-28, D011-28, D012-28, D013-28

AL-P1 (EU): G179-22, G179-27

Model: AL-P1		Date: 12-May-11	No.: RG179022
Subject: Part catalog correction		Prepared by: T.Hirakawa	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input checked="" type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ( )	<input type="checkbox"/> Tier 2

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
G1799590	G1799593	NV-RAM	1-1	O/O	71	16	

**Change/Reason:** Parts Catalog correction

Model: Model AL-C1	Date: 19-Apr-12	No.: RD009064
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Subject: Part information		Prepared by: Takuya Hirakawa	
From: 1st Tech Service Sect., MFP/P Tech Service Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input checked="" type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Other (      )		

Old part number	New part number	Description	Q'ty	Int	Note
-	<b>D0911361</b>	DUCT:RIGHT REAR SIDEWAYS:ALEX:ASS'Y	1		-
-	<b>D0911362</b>	DUCT:REAR:ALEX:ASS'Y	1		-

**Change:** Deodorizing filters were newly added as service parts for the AL-C1/AL-C1.5/AL-C2/AL-P1.

**Reason:** To meet the requests of customers who may report strange odors on these models.

**Note:**

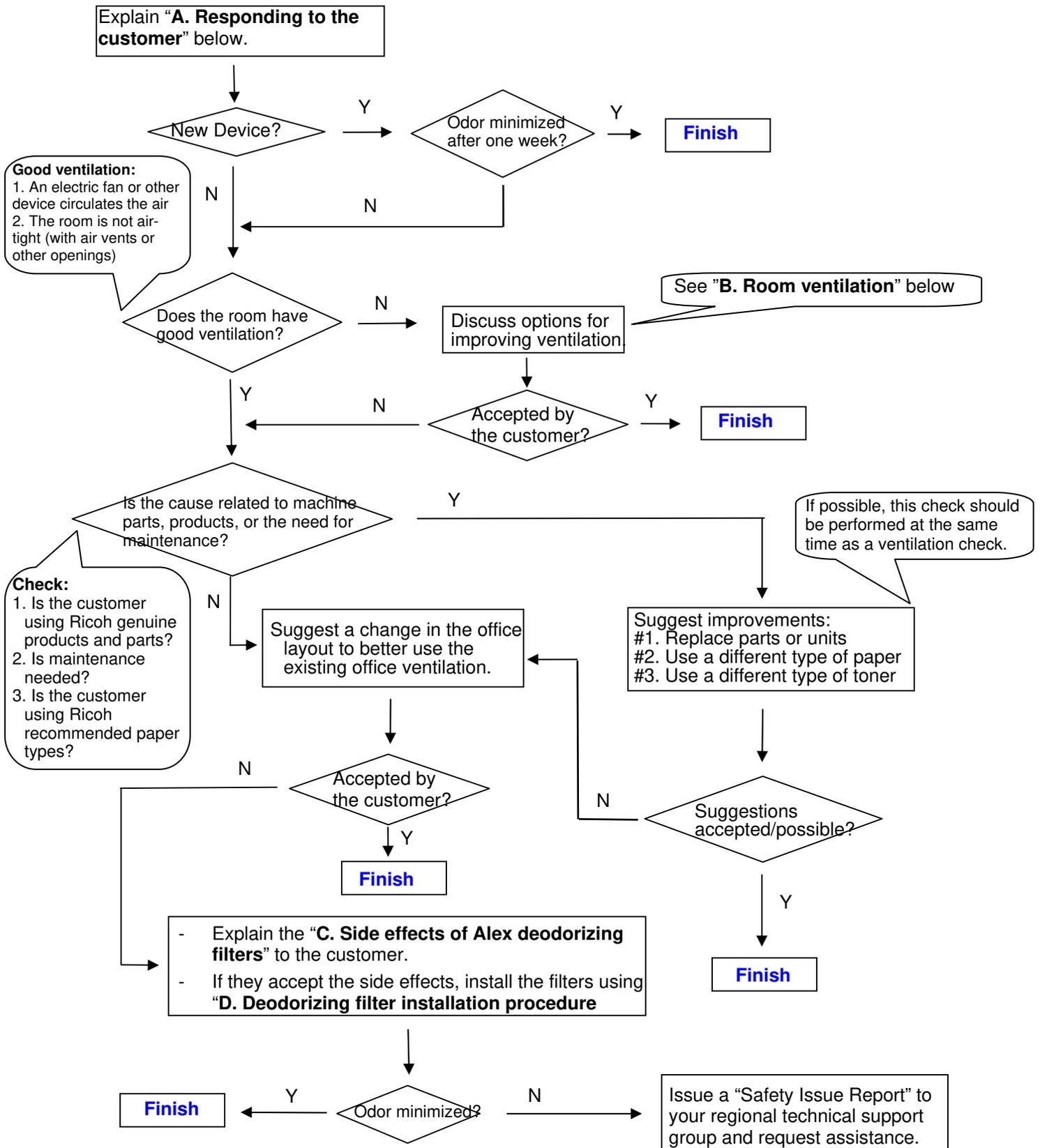
- In certain installation environments, some customers may have a relatively high sensitivity (low tolerance) to odors.
- The installation procedure and limitations of these filters are included below, as part of the **ACTION IN THE FIELD**.

**ACTION IN THE FIELD**

If a customer reports a strange odor from the machine, use the **flowchart below** to take the appropriate action.

Model: Model AL-C1	Date: 19-Apr-12	No.: RD009064
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**Flowchart**



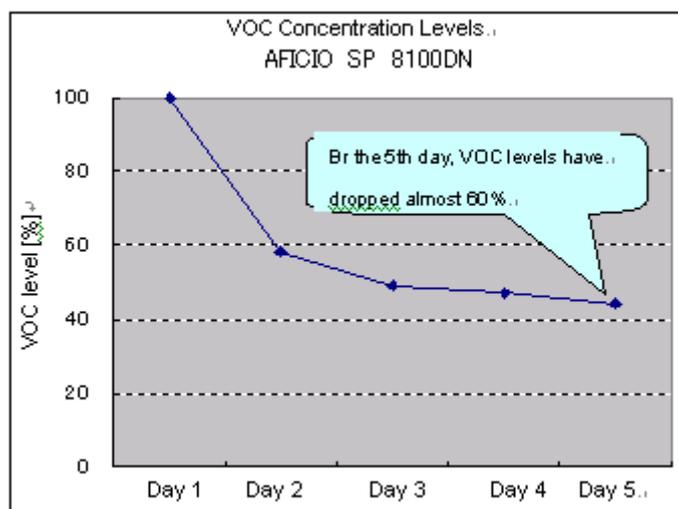
Model: Model AL-C1	Date: 19-Apr-12	No.: RD009064
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**Action referenced in the Flowchart above:**

**A. Responding to the Customer**

- The first step in handling an inquiry about Ricoh device odor is to explain the following to the customer:
  - Ricoh takes our customers' health and the health of our planet very seriously. This is highlighted by the fact that Ricoh products receive the German "Blue Angel" and Japanese "Eco Mark" certifications. This level of dedication is standard at Ricoh.
  - This means that a properly used and maintained Ricoh product should never be the source of problem in the office environment, including those related to employee health. However, keeping the device in a small, improperly ventilated space or sitting directly in the path of the exhaust fumes has been reported to cause unpleasant odors, head and throat pain, and general discomfort. Therefore, we strongly urge customers to make sure that their devices are placed in areas with proper ventilation, and that the exhaust is pointed safely away from anyone sitting nearby. Ideally, this should be done during initial installation, but working with existing customers to improve the quality of their office environment should be done whenever possible.
  - However, brand new devices have a particularly strong odor that might worry some customers. This odor is significantly reduced by the end of the **first week of use**, so please ask for the customer's patience. See Figure 1 below for an example using the Aficio SP 8100DN.
  - Volatile Organic Compounds (VOC) are particles of the component materials (glues, plastics, chemicals, etc.) that Ricoh devices are built with. VOC are the primary source of the odors produced by Ricoh devices, so tracking VOC levels produced by Ricoh devices is a good indicator of the strength of the odors. Figure 1 shows the VOC levels of a brand new Aficio SP 8100DN during the first 5 days of use. As the graph shows, the amount of VOC has dropped by almost 60%.

**Fig. 1**



\*1: Measurement was performed using a ppbRAE3000 from RAE Systems.

\*2: "VOC Level (%)" shows the VOC level on a given day as a percentage of the first day's level. Mathematically, this is expressed as [Level detected on a given day] / [First day's level]

- After the customer understands the above, work with the customer to ensure that there is enough ventilation and that the Ricoh devices are installed in a safe and proper manner.

Model: Model AL-C1	Date: 19-Apr-12	No.: RD009064
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**B. Room ventilation**

While Ricoh devices are certified as safe, ventilation in some offices can allow even the safe levels of \*VOC produced by Ricoh devices to build to levels that produce strong odors and health effects. In such cases, it is necessary to improve the ventilation of the immediate environment in which the Ricoh device is installed, in order to reduce particle concentration levels.

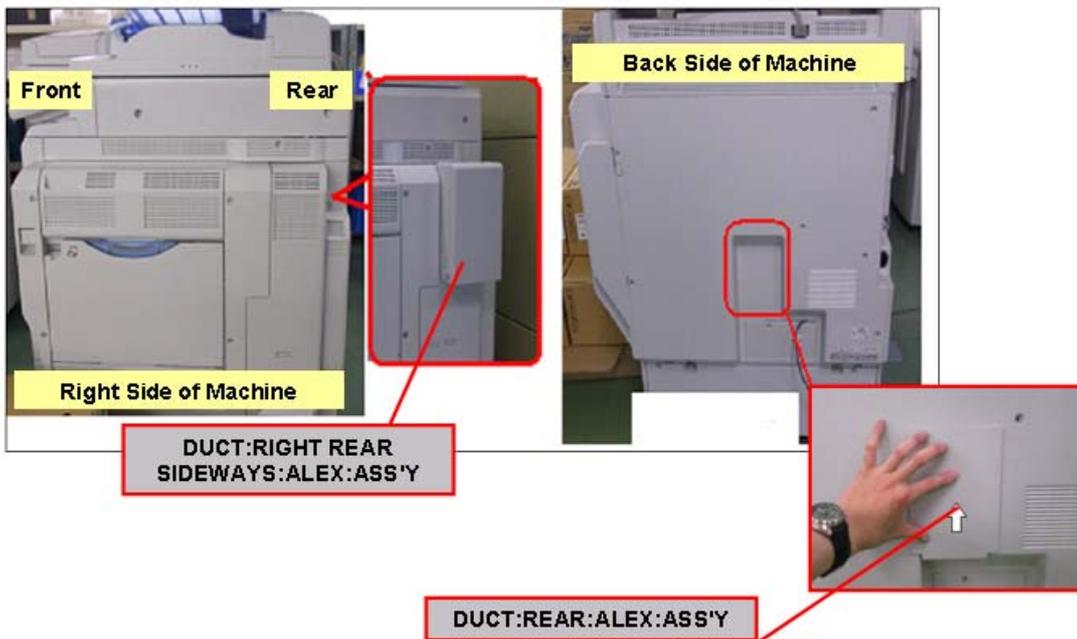
\*VOC: Volatile Organic Compounds are particles of the component materials (glues, plastics, chemicals, etc.) that Ricoh devices are built with.

**C. Deodorizing filter installation procedure**

**Locations of rear filter and fusing exhaust filter:**

DUCT:REAR:ALEX:ASS'Y

DUCT:RIGHT REAR SIDEWAYS:ALEX:ASS'Y



Model: Model AL-C1

Date: 19-Apr-12

No.: RD009064

**Attaching the rear filter:**

1. Clean the exterior cover around the rear exhaust area using a cloth.  
**Important:** Make sure to thoroughly clean the contact area for the double-sided tape.



2. Attach the rear deodorizing filter as shown in the photo below.



Model: Model AL-C1

Date: 19-Apr-12

No.: RD009064

**Attaching the fusing exhaust deodorizing filter:**

3. Clean the exterior cover around the fusing exhaust area using a cloth.  
**Important:** Make sure to thoroughly clean the contact area for the double-sided tape.



4. Attach the fusing exhaust deodorizing filter as shown in the photo below.



Model: Model AL-C1

Date: 19-Apr-12

No.: RD009064

**D. Limitations of the deodorizing filters**

The following limitations exist with these filters:

If the temperature of the installation environment is **29C (84.2F) or higher:**

- Continuous printing/copying should be limited to a maximum of 38 minutes
- The Auto Off Timer should be set to its default value (60 minutes)

This is because when the temperature is this high, the properties and behavior of the toner change, and image quality issues begin to occur.

Model: AL-P1	Date: 13-Jan-11	No.: RG179023
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Subject: Printer Service Mode		Prepared by: T.Hirakawa	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input checked="" type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Other (      )		

**Service Manual Revision**

The areas in **bold** were corrected.

“Controller Service Mode” of Service Manual (pg.202)

			Bit 5 to 7: Not used. Do not change the settings.			
1001 004	Bit Switch 4	CTL	Adjust bit switch settings. DFU			
1001 005	Bit Switch 5	CTL	Bit 0 to 2: Not used. Do not change the settings. Bit 3: Enables the “%%” command of the PostScript detection condition for the auto print language selection function. 0: Enabled 1: Disabled Bit 4 to 7: Not used. Do not change the settings.			
1001 006	Bit Switch 6	CTL	Adjust bit switch settings. DFU			
			<table border="1"> <tr> <td><b>Bit: 7</b></td> <td><b>0: Disable</b></td> <td><b>1: Enable</b></td> </tr> <tr> <td colspan="3"><b>Timing of the PjL Status ReadBack (JOB END) when printing multiple collated copies</b></td> </tr> </table> <p><b>This bit switch determines the timing at which the device sends the PjL USTATUS JOB END signal to the client in cases where multiple collated copies are made.</b></p> <p><b>0 (default): The device sends the signal after printing out the first copy. As a result, the page counter is incremented after the first copy is made, and then again at the end of the job.</b></p> <p><b>1: The device sends the signal after printing out the last copy. As a result, the page counter is incremented at the end of the job.</b></p>	<b>Bit: 7</b>	<b>0: Disable</b>	<b>1: Enable</b>
<b>Bit: 7</b>	<b>0: Disable</b>	<b>1: Enable</b>				
<b>Timing of the PjL Status ReadBack (JOB END) when printing multiple collated copies</b>						
1001 007	Bit Switch 7	CTL	Adjust bit switch settings. DFU			
1001 008	Bit Switch 8	CTL				

Reissued:10-Apr-12

Model: AL-P1	Date: 28-Jun-11	No.: RG179024a
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**RTB Reissue**

The items in ***bold italics*** were corrected.

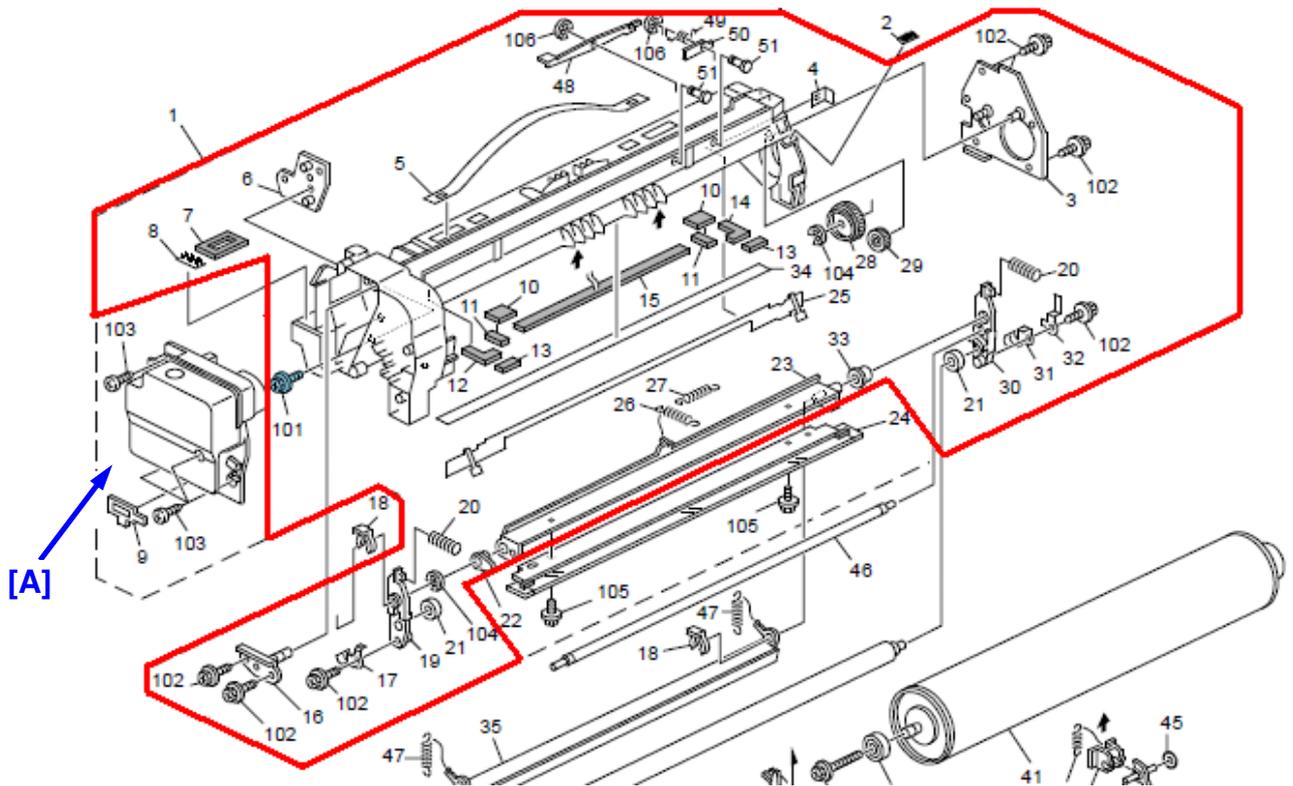
Subject: Parts catalog correction		Prepared by: T.Hirakawa	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input checked="" type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ( )	<input type="checkbox"/> Tier 2

**Change/Reason:** The illustration shown below was corrected.

- The area enclosed by the red box is the correct outline for P/N G1792211 (index #1).
- The cover marked "[A]" below is included in P/N G1792200 (PCU).
- ***Cleaning Blade (p/n:D0092351) is not included in Frame:PCU:Upper:Ass'y (p/N:G1792211)***

Pg. 28

11.PCDU 2 (G179)

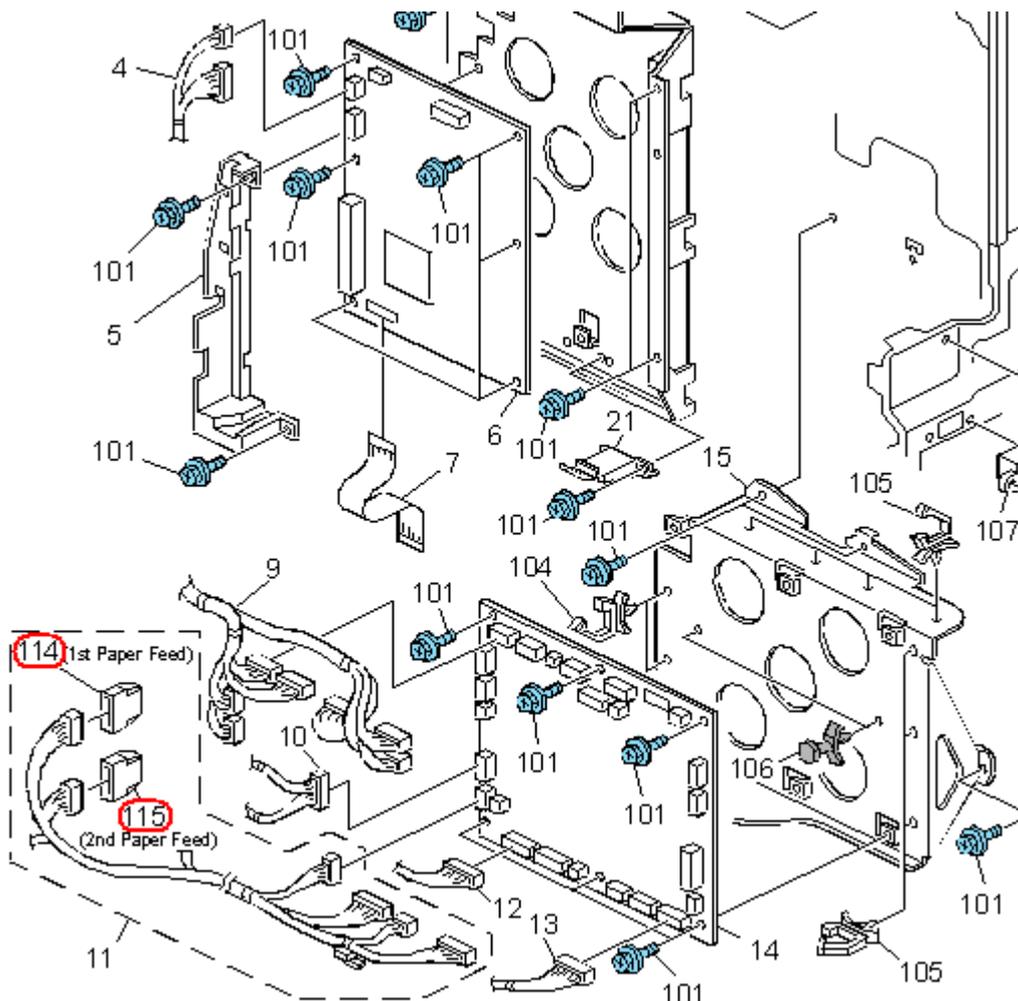


Model: AL-P1		Date: 11-Jul-11	No.: RG179025
Subject: Part Information		Prepared by: T.Hirakawa	
From: 1st Overseas Tech Support Sec., 1st PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input checked="" type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ( )	<input type="checkbox"/> Tier 2

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
-	<b>11026257</b>	RELAY CONNECTOR - 14P	0-1		69	114	
-	<b>11026271</b>	CONNECTOR:53358-1442	0-1		69	115	

**Change/Reason:**

As per field request, the following parts were newly added as service parts.



Model: AL-C2		Date: 05-Mar-14	No.: RD129048
Subject: Part Catalog Correction		Prepared by: M.Yoneda	
From: 2nd Tech Service Sect., MFP/P Tech Service Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input checked="" type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ( )	<input type="checkbox"/> Tier 2

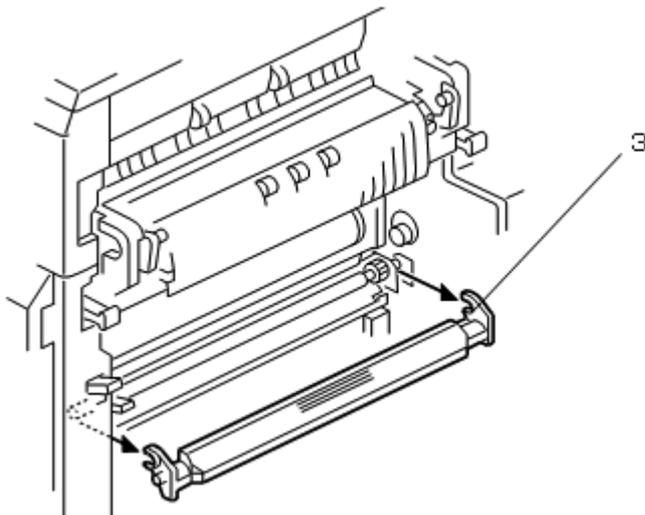
Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
-D0092617	D1292617	GUIDEPLATE:REGISTRATION:UPPER	0-1	X/O	14	3	

**Change:** The method for attaching the COVER-PAPER DUST REMOVAL & GUIDPLATE:REGISTRATION:UPPER was changed. **See details below.**

**Reason:** To further strengthen the integrity of the connection.

**Current method:**

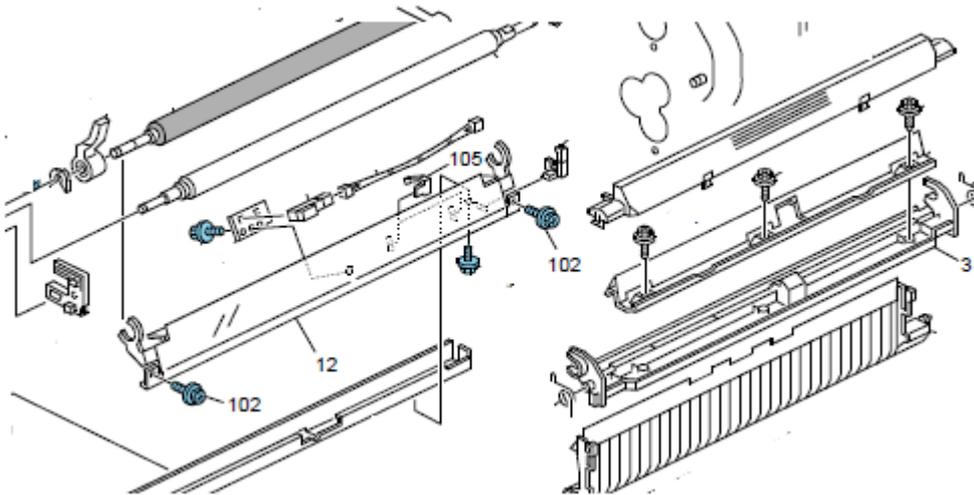
The guide plate is fixed by mounting the ends of the shaft and fixing it in place with spring pressure.



Model: AL-C2	Date: 05-Mar-14	No.: RD129048
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**New method:**

- Co-fastening ribs were added to the guide plate (index #3 below).
- This guide plate and registration lower guide plate (index #12) are fastened to each other using a screw (after the shaft is attached).
- The length of this fastening screw was increased from 6mm to 8mm (index #102)



**RAI (China) Production**

Name	Destination	Product Code	Serial #
Aficio MP 4002	Asia	D129-29	W523MC40001 ~
Gestetner MP 4002			
Lanier MP 4002			
Aficio MP 4002	Taiwan	D129-19	W524M100001 ~
Gestetner MP 4002			
Aficio MP 4002	China	D129-21	W523MC10001 ~
Gestetner: DSm940		D129-25	W523MC20001 ~
Aficio MP 4002SP	Asia	D129-69	W523MC50001 ~
Gestetner MP 4002SP			
Lanier MP 4002SP			
Aficio MP 4002SP	Taiwan	D129-59	W523MC00001 ~
Gestetner MP 4002SP			
Aficio MP 4002SP	China	D129-61	W523MC30001 ~
Aficio MP 5002	Asia	D130-29	W533MC40001 ~
Gestetner MP 5002			
Lanier MP 5002			
Aficio MP 5002	Taiwan	D130-19	W534M100001 ~
Gestetner MP 5002			
Aficio MP 5002	China	D130-21	W533MC10001 ~
Aficio MP 5002SP	Asia	D130-69	W533MC50001 ~
Gestetner MP 5002SP			
Lanier MP 5002SP			
Aficio MP 5002SP	Taiwan	D130-59	W533MC00001 ~
Gestetner MP 5002SP			
Aficio MP 5002SP	China	D130-61	W533MC70001 ~

**Reissued:26-Sep-14**

Model: AL-C2b	Date: 14-Mar-14	No.: RD129049a
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**RTB Reissue**

The items in ***bold italics*** were corrected or added.

Subject: Parts change and addition information.		Prepared by: Y.Saitoh	
From: 2nd Tech Service Sect., MFP/P Tech Service Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input checked="" type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ( )	<input type="checkbox"/> Tier 2

**Change/Reason:** To prevent the cleaning web coming loose, the following parts are changed and newly added to the fusing unit.

[1] Addition of a variable brake on the cleaning web.

[2] Changed the one-way clutch method to ratchet method on the holder roller.

Old part number	New part number	Description	Q'ty	Int	Page	Index	Set	Note
D1294305	D1294304	CLEANING UNIT:ASS'Y	1	X/O	76	*		
AE040099	AE040100	ROLLER: PLATE	1	X/X	76	9	B	
-	D1294331	FLAT NUT: BRAKE	1		76	24**	A	Please refer to [A] for [1]
-	D1294332	BRAKE: WEB	1		76	25**	A	Please refer to [B] for [1]
D0094355	-	ROLLER CLUTCH			76	8		Deleted, please refer to [C]
-	D1294359	BUSHING: ROLLER: PLATE: FRONT	2	X/X	76	26**	B	Please refer to [D] for [2]
-	B0654211	PRESSURE ROLLER GEAR	1		76	27**	B	Please refer to [E] for [2]
-	B1404209	BRACKET: STOPPER: ASS'Y	1		76	28**	B	Please refer to [F] for [2]
-	<b><i>D1294309</i></b>	<b><i>BRAKE: WEB: ASS'Y</i></b>	<b><i>1</i></b>		<b><i>76</i></b>	<b><i>29**</i></b>		
-	<b><i>D0094321</i></b>	<b><i>STAY: UPPER</i></b>	<b><i>1</i></b>		<b><i>76</i></b>	<b><i>30**</i></b>		

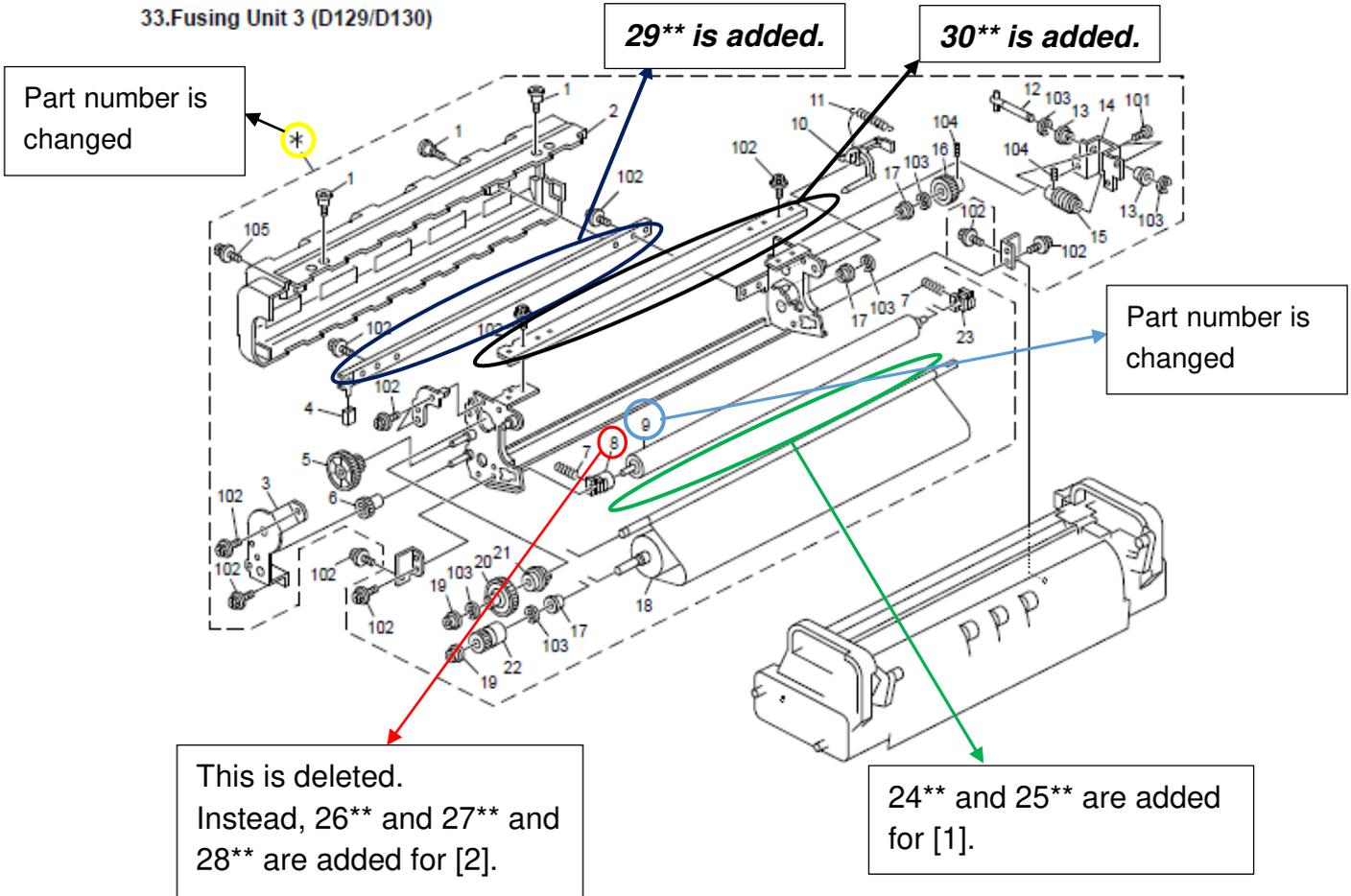
• Part number of Fusing Unit doesn't change.

\*\* : New Index

Reissued:26-Sep-14

Model: AL-C2b	Date: 14-Mar-14	No.: RD129049a
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33.Fusing Unit 3 (D129/D130)



Reissued:26-Sep-14

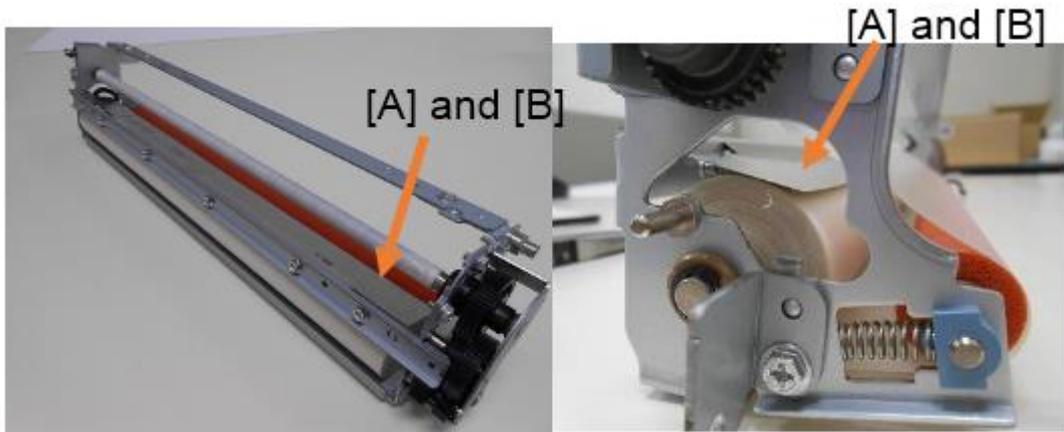
Model: AL-C2b

Date: 14-Mar-14

No.: RD129049a

**For details of [1], please refer to the following pictures.**

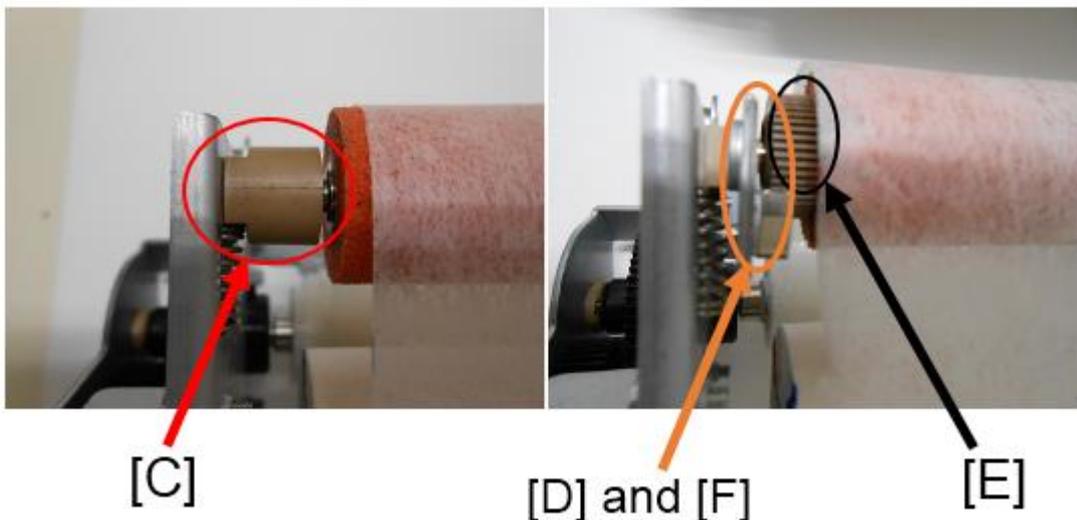
[A] and [B] are the variable brake.

**For details of [2], please refer to the following picture.**

One-way clutch method was used before. Ratchet method is used after.

&lt;One-way clutch method&gt;

&lt;Ratchet method&gt;

**For correspondence on MIF:**

Please install a new cleaning unit (p/n: D1294304) when the cleaning web issue occurs, because individual parts are not compatible due to changing of the frame of the fusing unit. After that, individual parts can be replaced.

Reissued:26-Sep-14

Model: AL-C2b	Date: 14-Mar-14	No.: RD129049a
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**RAI (China) Production**

Name	Destination	Product Code	Serial #
Aficio MP 4002	Asia	D129-29	W524M140023~
Gestetner MP 4002			
Lanier MP 4002			
Aficio MP 4002	Taiwan	D129-19	W524M100001~
Gestetner MP 4002			
Aficio MP 4002	China	D129-21	W523MC10116~
Gestetner: DSm940		D129-25	W524M120001~
Aficio MP 4002SP	Asia	D129-69	W523MC50142~
Gestetner MP 4002SP			
Lanier MP 4002SP			
Aficio MP 4002SP	Taiwan	D129-59	W524M100010~
Gestetner MP 4002SP			
Aficio MP 4002SP	China	D129-61	W523MC30203~
Aficio MP 5002	Asia	D130-29	W534M140007~
Gestetner MP 5002			
Lanier MP 5002			
Aficio MP 5002	Taiwan	D130-19	W534M100001~
Gestetner MP 5002			
Aficio MP 5002	China	D130-21	W533MC10011~
Aficio MP 5002SP	Asia	D130-69	W534M150001~
Gestetner MP 5002SP			
Lanier MP 5002SP			
Aficio MP 5002SP	Taiwan	D130-59	W534M100002~
Gestetner MP 5002SP			
Aficio MP 5002SP	China	D130-61	W533MC70061~
Ricoh: Aficio MP 5002	NA	D130-91	W533MC22811~
Savin: MP 5002			
Lanier: MP 5002			
Ricoh: Aficio SP 8200DN	NA	M132-17	T424M110004~
Ricoh: Aficio SP 8200DN	EU/Asia	M132-27	T424M130006~
Lanier:SP 8200DN			

Model: AL-P1	Date: 27-Jan-15	No.: RG179026
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Subject: Parts change and addition information.		Prepared by: A.Ishida	
From: 2nd Tech Service Sect., MFP/P Tech Service Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input checked="" type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ( )	<input type="checkbox"/> Tier 2

To prevent the cleaning web from coming loose, the following parts are changed or newly added to the fusing unit.

[1] The addition of a variable brake to the cleaning web.

[2] Changed the one-way clutch method on the holder roller to ratchet method.

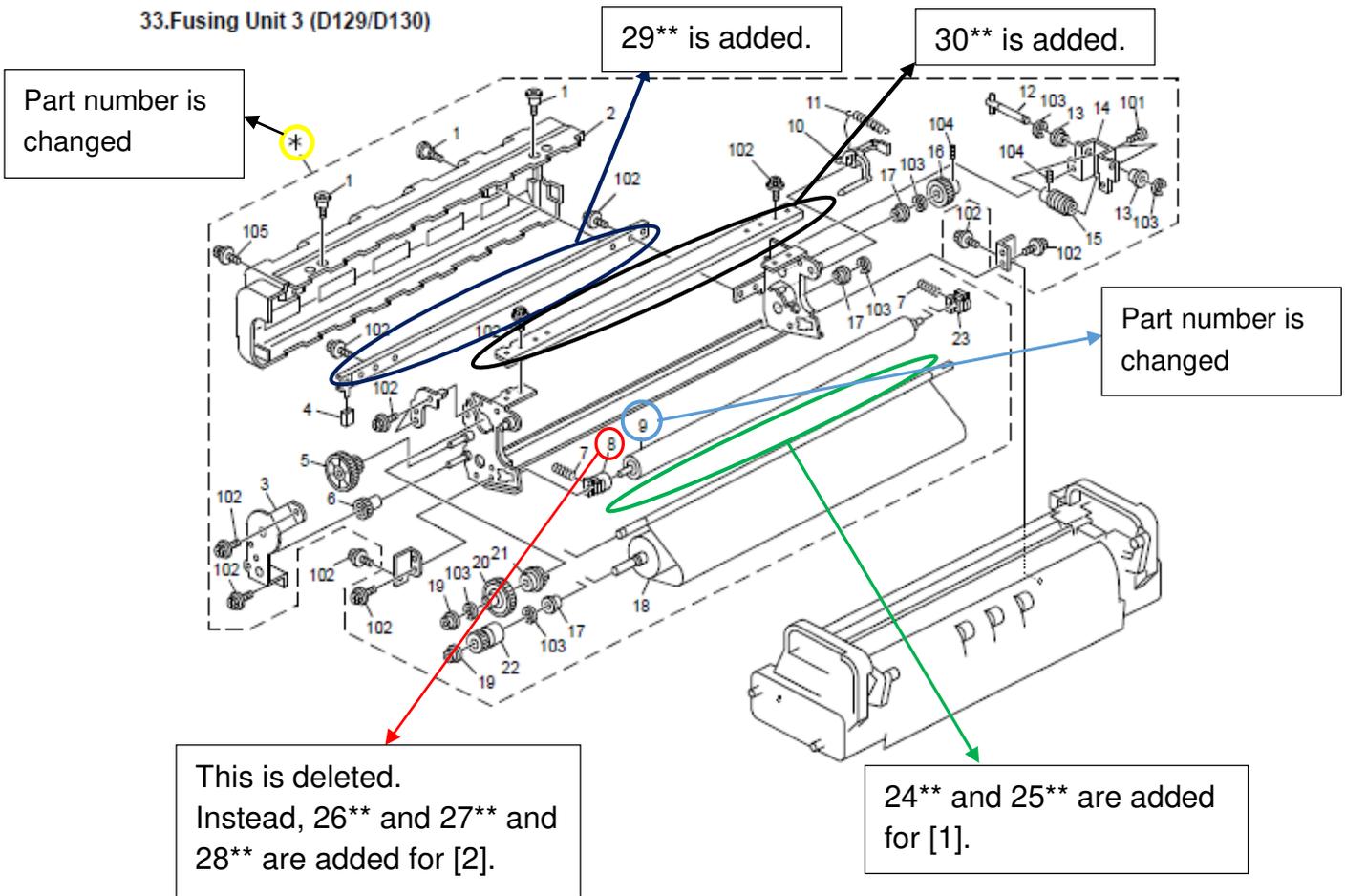
Old part number	New part number	Description	Q'ty	Int	Page	Index	Set	Note
D1294305	D1294304	CLEANING UNIT:ASS'Y	1	X/O	76	*		
AE040099	AE040100	ROLLER: PLATE	1	X/X	76	9	B	
-	D1294331	FLAT NUT: BRAKE	1		76	24**	A	Please refer to [A] for [1]
-	D1294332	BRAKE: WEB	1		76	25**	A	Please refer to [B] for [1]
D0094355	-	ROLLER CLUTCH			76	8		Deleted, please refer to [C]
-	D1294359	BUSHING: ROLLER: PLATE: FRONT	2	X/X	76	26**	B	Please refer to [D] for [2]
-	B0654211	PRESSURE ROLLER GEAR	1		76	27**	B	Please refer to [E] for [2]
-	B1404209	BRACKET: STOPPER: ASS'Y	1		76	28**	B	Please refer to [F] for [2]
-	D1294309	BRAKE: WEB: ASS'Y	1		76	29**		
-	D0094321	STAY: UPPER	1		76	30**		

• Part number of the Fusing Unit does not change.

\*\* : New Index

Model: AL-P1	Date: 27-Jan-15	No.: RG179026
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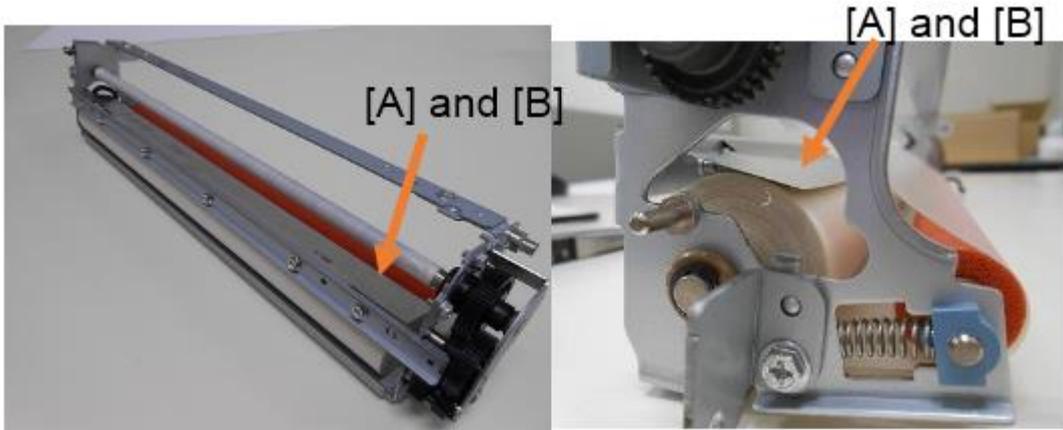
33.Fusing Unit 3 (D129/D130)



Model: AL-P1	Date: 27-Jan-15	No.: RG179026
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**[1] Variable brake**

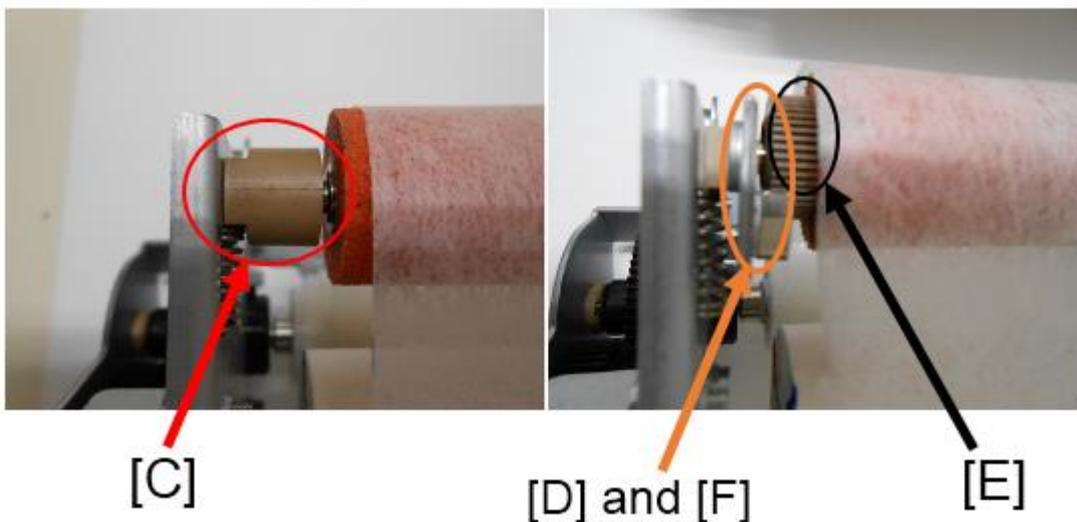
[A] and [B] are the variable brake.



**[2]: One way clutch method**

One-way clutch method is before.  
One-way clutch method

Ratchet method is after.  
Ratchet method



**Action to take on MIF:**

Please install a new cleaning unit (p/n: D1294304) when a cleaning web issue occurs, because individual parts are not compatible due to modification of a frame on the fusing unit. After that, individual parts can be replaced.

Model: AL-P1	Date: 27-Jan-15	No.: RG179026
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**RAI (China) Production**

Name	Destination	Product Code	Serial #
Aficio MP 4002	Asia	D129-29	W524M140023~
Gestetner MP 4002			
Lanier MP 4002			
Aficio MP 4002	Taiwan	D129-19	W524M100001~
Gestetner MP 4002			
Aficio MP 4002	China	D129-21	W523MC10116~
Gestetner: DSm940		D129-25	W524M120001~
Aficio MP 4002SP	Asia	D129-69	W523MC50142~
Gestetner MP 4002SP			
Lanier MP 4002SP			
Aficio MP 4002SP	Taiwan	D129-59	W524M100010~
Gestetner MP 4002SP			
Aficio MP 4002SP	China	D129-61	W523MC30203~
Aficio MP 5002	Asia	D130-29	W534M140007~
Gestetner MP 5002			
Lanier MP 5002			
Aficio MP 5002	Taiwan	D130-19	W534M100001~
Gestetner MP 5002			
Aficio MP 5002	China	D130-21	W533MC10011~
Aficio MP 5002SP	Asia	D130-69	W534M150001~
Gestetner MP 5002SP			
Lanier MP 5002SP			
Aficio MP 5002SP	Taiwan	D130-59	W534M100002~
Gestetner MP 5002SP			
Aficio MP 5002SP	China	D130-61	W533MC70061~
Ricoh: Aficio MP 5002	NA	D130-91	W533MC22811~
Savin: MP 5002			
Lanier: MP 5002			
Ricoh: Aficio SP 8300DN	NA	M132-17	T424M110004~
Ricoh: Aficio SP 8300DN	EU/Asia	M132-27	T424M130006~
Lanier:SP 8300DN			

Model: AL-P2	Date: 29-Jun -17	No.: RM132023
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Subject: Part information		Prepared by: Takuya Hirakawa	
From: 1st Tech Service Sect., MFP/P Tech Service Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input checked="" type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Other (        )		

Old part number	New part number	Description	Q'ty	Int	Note
-	<b>D0911361</b>	DUCT:RIGHT REAR SIDEWAYS:ALEX:ASS'Y	1		-
-	<b>D0911362</b>	DUCT:REAR:ALEX:ASS'Y	1		-

**Change:** Deodorizing filters were newly added as service parts for the AL-C1/AL-C1.5/AL-C2/AL-P1/AL-P2.

**Reason:** To meet the requests of customers who may report strange odors on these models.

**Note:**

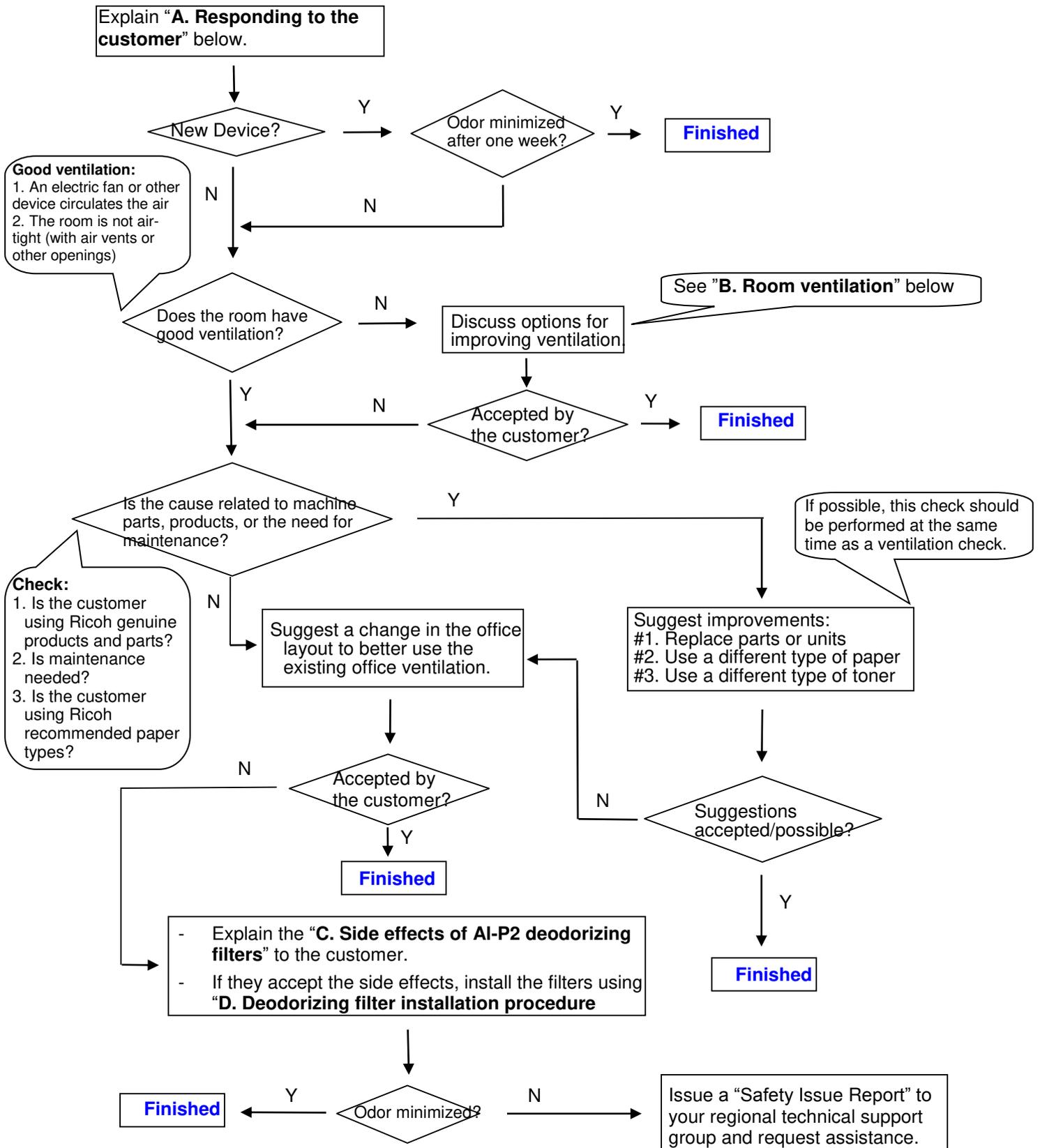
- In certain installation environments, some customers may have a relatively high sensitivity (low tolerance) to odors.
- The installation procedure and limitations of these filters are included below, as part of the **ACTION IN THE FIELD**.

**ACTION IN THE FIELD**

If a customer reports a strange odor on the machine, use the **flowchart below** to take the appropriate action.

Model: AL-P2	Date: 29-Jun -17	No.: RM132023
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**Flowchart**



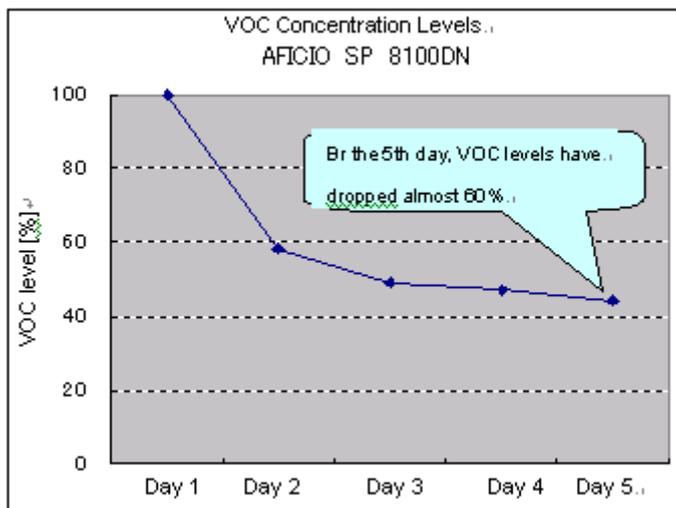
Model: AL-P2	Date: 29-Jun -17	No.: RM132023
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**Action referenced in the Flowchart above:**

**A. Responding to the Customer**

- The first step in handling an inquiry about Ricoh device odor is to explain the following to the customer:
  - Ricoh takes our customers' health and the health of our planet very seriously. This is highlighted by the fact that Ricoh products receive the German "Blue Angel" and Japanese "Eco Mark" certifications. This level of dedication is standard at Ricoh.
  - This means that a properly used and maintained Ricoh product should never be the source of problems in the office environment, including those related to employee health. However, keeping the device in a small, improperly ventilated space or sitting directly in the path of the exhaust fumes has been reported to cause unpleasant odors, head and throat pain, and general discomfort. Therefore, we strongly urge customers to make sure that their devices are placed in areas with proper ventilation, and that the exhaust is pointed safely away from anyone sitting nearby. Ideally, this should be done during initial installation, but working with existing customers to improve the quality of their office environment should be done whenever possible.
  - However, brand new devices have a particularly strong odor that might worry some customers. This odor is significantly reduced by the end of the **first week of use**, so please ask for the customer's patience. See Figure 1 below for an example using the Aficio SP 8100DN.
  - Volatile Organic Compounds (VOC) are particles of the component materials (glues, plastics, chemicals, etc.) that Ricoh devices are built with. VOC are the primary source of the odors produced by Ricoh devices, so tracking VOC levels produced by Ricoh devices is a good indicator of the strength of the odors. Figure 1 shows the VOC levels of a brand new Aficio SP 8100DN during the first 5 days of use. As the graph shows, the amount of VOC has dropped by almost 60%.

**Fig. 1**



\*1: Measurement was performed using a ppbRAE3000 from RAE Systems.

\*2: "VOC Level (%)" shows the VOC level on a given day as a percentage of the first day's level. Mathematically, this is expressed as [Level detected on a given day] / [First day's level]

- After the customer understands the above, work with the customer to ensure that there is enough ventilation and that the Ricoh devices are installed in a safe and proper manner.

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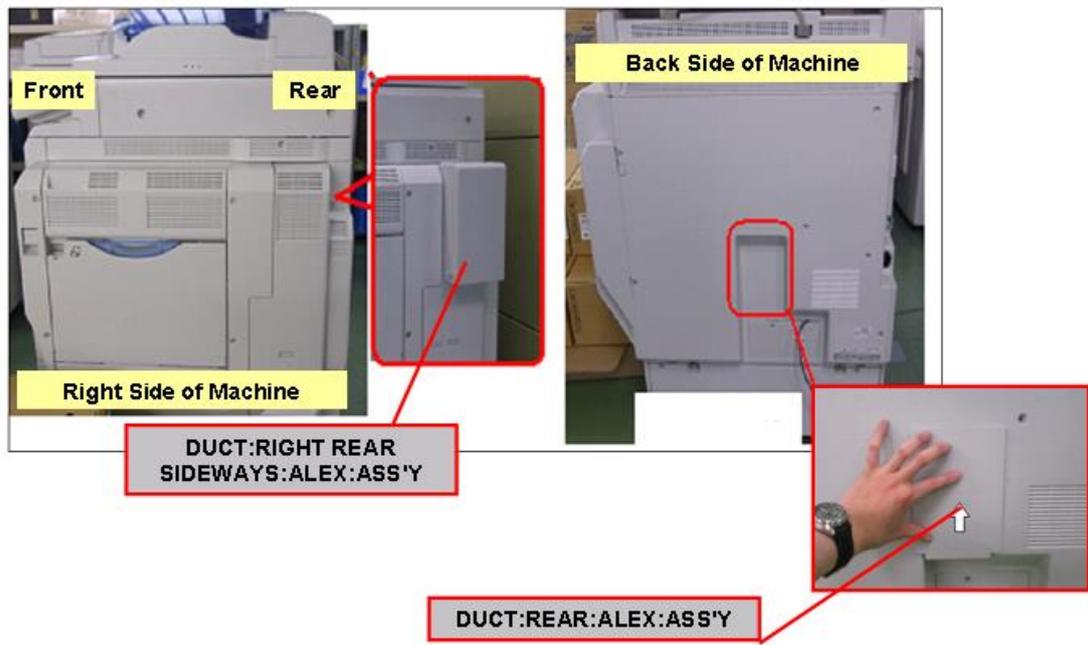
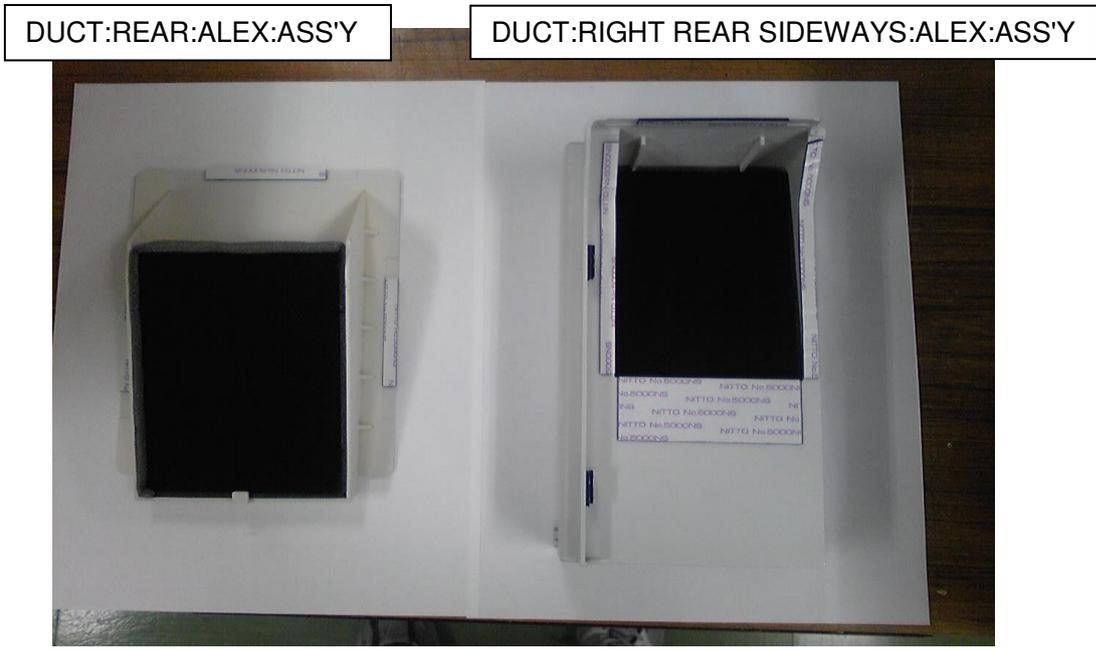
**B. Room ventilation**

While Ricoh devices are certified as safe, ventilation in some offices can allow even the safe levels of \*VOC produced by Ricoh devices to build to levels that produce strong odors and health effects. In such cases, it is necessary to improve the ventilation of the immediate environment in which the Ricoh device is installed, in order to reduce particle concentration levels.

\*VOC: Volatile Organic Compounds are particles of the component materials (glues, plastics, chemicals, etc.) that Ricoh devices are built with.

**C. Deodorizing filter installation procedure**

**Locations of rear filter and fusing exhaust filter:**



Model: AL-P2

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No.: RM132023

**Attaching the rear filter:**

1. Clean the exterior cover around the rear exhaust area using a cloth.  
**Important:** Make sure to thoroughly clean the contact area for the double-sided tape.



2. Attach the rear deodorizing filter as shown in the photo below.



Model: AL-P2

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**Attaching the fusing exhaust deodorizing filter:**

3. Clean the exterior cover around the fusing exhaust area using a cloth.  
**Important:** Make sure to thoroughly clean the contact area for the double-sided tape.



4. Attach the fusing exhaust deodorizing filter as shown in the photo below.



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**D. Limitations of the deodorizing filters**

The following limitations exist with these filters:

If the temperature of the installation environment is **29C (84.2F) or higher**:

- Continuous printing/copying should be limited to a maximum of 38 minutes
- The Auto Off Timer should be set to its default value (60 minutes)

This is because when the temperature is this high, the properties and behavior of the toner change, and image quality issues begin to occur.